1	BEFORE THE PUBLIC UTILITIES COMMISSION
2	OF THE STATE OF HAWAII
3	ORIGINAL
4	In the Matter of the Application of)
5	HAWAIIAN ELECTRIC COMPANY, INC.) DOCKET NO. 2008-0083
6	For Approval of Rate Increases and)
7	Revised Rate Schedules and Rules.)
8	
9	
10	TRANSCRIPT OF PROCEEDINGS
11	VOLUME IV
12	
13	Public Utilities Commission hearing held on Thursday,
14	October 29, 2009, commencing at 9 a.m., at 465 South King
15	Street, Honolulu, Hawaii, pursuant to Notice.
16	
17	F 23
18	CO S TI
19	PUBLIC UTILITY OF THE PORTED BY: TRISTAN-JOSEPH, CSR NO. 469
20	REPORTED BY: TRISTAN-JOSEPH, CSR NO. 469
21	REPORTED BY: TRISTAN-JOSEPH, CSR NO. 469 Certified Shorthand Reporter
22	
23	
24	
25	

1	APPEARANCES:
2	For the Public Utilities Commission:
3	CARLITO P. CALIBOSO, Chairman
4	LESLIE H. KONDO, Commissioner
5	JOHN E. COLE, Commissioner
6	HAWAI'I PUBLIC UTILITIES COMMISSION
7	465 SOUTH KING STREET, ROOM 103
8	HONOLULU, HAWAI'I 96813
9	Phone: (808) 586-2020 Fax: (808) 586-2066
10	For HECO:
11	DEAN K. MATSUURA
12	Manager - Regulatory Affairs
13	Hawaiian Electric Company, Inc.
14	P.O. Box 2750
15	Honolulu, Hawaii 96840-0001
16	(808) 543-4622 (808) 203-1518 fax
17	Dean.matsuura@heco.com
18	
19	THOMAS W. WILLIAMS, JR., ESQ.
20	PETER Y. KIKUTA, ESQ.
21	Goodsill Anderson Quinn & Stifel
22	Alii Place, Suite 1800
23	1099 Alakea Street
24	Honolulu, Hawaii 96813
25	(808)547-5665; pkikuta@goodsill.com

1	APPEARANCES (Continued)
2	For Consumer Advocacy:
3 .	CATHERINE P. AWAKUNI, Executive Director
4	Division of Consumer Advocacy
5	JON S. ITOMURA, ESQ.
6	Department of Commerce and Consumer Affairs
7	P.O. Box 541 (Mailing address)
8	Honolulu, Hawaii 96809
9	335 Merchant Street, Room 326
10	Honolulu, Hawaii 96813
11	(808) 586–2786
12	(808)586-2780 fax
13	Consumeradvocate@dcca.hawaii.gov
14	
15	For the Department of Defense:
16	DR. KAY DAVOODI
17	NAVFAC HQ ACQ-URASO
18	Utility Rates and Studies Office
19	1322 Patterson Avenue, SE, Suite 1000
20	Washington Navy Yard
21	Washington, D.C. 20374-5065
22	(202) 433-7159.
23	Khojasteh.davoodi@navy.mil
24	
25	

1	APPEARANCES (Continued)
2	For the Department of Defense:
3	JAMES N. MCCORMICK, ESQ.
4	Naval Facilities Engineering Command, Pacific
5	258 Makalapa Drive, Suite 100
6	Pearl Harbor, Hawaii 96860-3134
7	(808) 472-1168
8	(808)471-0611 fax
9	James.n.mccormick@navy.mil
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

1	PROCEEDINGS
2	CHAIRMAN CALIBOSO: Good morning.
3	I'd like to call this hearing back to order.
4	This is the continuation of Docket 2008-0083.
5	And, again, my name is Carlito Caliboso. I'm the
6	Chairman of the Public Utilities Commission, joined by
7	Commissioner John Cole and Commissioner Leslie Kondo and
8	consultant Scott Hempling.
9	Can I have the parties appearances for the record,
10	please?
11	MR. KIKUTA: Good morning, Chairman Caliboso,
12	Commissioner Cole, Commission Kondo, Mr. Hempling.
13	Peter Kikuta appearing on behalf of Hawaiian
14	Electric Company.
15	MR. ITOMURA: Good morning, Chair Caliboso,
16	Commissioner Cole, Commissioner, Mr. Hempling.
17	John Itomura on behalf of the Consumer Advocate.
18	With me this morning is Mike Brosch, Steve Carver,
19	Dean Nishina, and Cat Awakuni will be joining us later.
20	MR. MCCORMICK: Good morning, Commissioners,
21	Chairman Caliboso, Mr. Hempling.
22	This is the Department of Defense represented,
23	again, today by James McCormick and Dr. Kay Davoodi.
24	CHAIRMAN CALIBOSO: Thank you all.
25	We're going to start with Panel 9 today.

1	Do we need to cover anything before we start the
2	panels?
3	MR. KIKUTA: Nothing from Hawaiian Electric.
4	MR. ITOMURA: Nothing from the Consumer Advocate.
5	MR. MCCORMICK: Nothing from the Department of
6	Defense.
7	CHAIRMAN CALIBOSO: Thank you very much.
8	So if you could start with the witnesses.
9	MR. KIKUTA: Sure. Thank you.
10	For Panel 9, Hawaiian Electric Company has Peter
11	Young, Director of the Pricing Division, Darren Yamamoto,
12	Manager of Customer Service, and Bruce Tamashiro, Director of
13	Corporate and Property Accounting.
14	They have all been sworn in.
15	CHAIRMAN CALIBOSO: Thank you.
16	MR. ITOMURA: For Panel 9, the Consumer Advocate
17	has witness Mike Brosch and witness Steve Carver.
18	MR. MCCORMICK: The Department of Defense has no
19	witnesses.
20	CHAIRMAN CALIBOSO: Thank you.
21	Go ahead, Mr. Hempling.
22	MR. HEMPLING: Good morning, ladies and gentlemen.
23	We're going to address the topic of Other Operating
24	Revenues, and I'd like to start with HECO-304. It's test year
25	Other Operating Revenues and, also, if you can pull out HECO

1	PUC IR 177 and 178.
2	Is that Mr. Young's area?
3	MR. KIKUTA: Yes, this is.
4	MR. HEMPLING: Good morning, Mr. Young.
5	MR. YOUNG: Good morning, Mr. Hempling.
6	MR. HEMPLING: Looking at HECO-304, you got a line
7	item called Miscellaneous Other Operating Revenues. Correct?
8	MR. YOUNG: And you refer to the heading near the
9	top of the exhibit.
10	MR. HEMPLING: I'm looking over on the left. It's
11	page 1 of 1. You got first non-sell selected utility charges
12	and then series of items under the heading Miscellaneous Other
13	Operating revenue.
14	MR. YOUNG: Yes, I see that.
15	MR. HEMPLING: Yeah, I got it okay.
16	So these items that are listed here, amortization
17	of deferred gains property licenses and leases, parking and
18	carpool revenue, telecom, rent, payment protection, insurance,
19	and others.
20	Do you see that?
21	MR. YOUNG: Yes.
22	MR. HEMPLING: So how did you go about estimating
23	the test year numbers for each of these categories?
24	MR. YOUNG: The estimates are these are
25	summaries of a budget information that I secured from our

1	management accounting group.
2	MR. HEMPLING: Okay. So you're just the compiler
3	of the data. You're not the person that made the judgements
4	about these numbers?
5	MR. YOUNG: I did not personally make the budgeted
6	estimates, that's correct.
7	MR. HEMPLING: Okay. So where in the Company were
8	the judgments made about these estimates, you know, what
9	department, what person?
10	MR. YOUNG: I indicated, I received or secured
11	these estimates from the management accounting. That's our
12	budget group. My understanding, from them, is that various
13	divisions and departments contribute different estimates to
14	them for these items.
15	MR. HEMPLING: Okay. Now we asked a question of
16	you in PUC IR 178 asking you to compare this 2009 test year
17	amount of other operating revenues to the amount in HECO's
18	2009 Form 1.
19	Do you recall that?
20	MR. YOUNG: You refer to PUC 178
21	MR. HEMPLING: Yes.
22	MR. YOUNG: the comparison of the test year
23	versus for the 2008 numbers, I believe.
24	MR. HEMPLING: Correct. Just so I don't cloudy the
25	record, when we talk about HECO's 2009 Form 1. I quess we're

```
talking about the Form 1 that reflects activity in the
1
     calendar year 2008. Correct?
2
3
                MR. YOUNG: Yes, yes, I understand.
4
                MR. HEMPLING: All right. That's the terminology
5
     that they used I guess.
 6
                So, for purposes of the Form 1, the calendar year
     2008 number for other operating revenues 6,528,974. Correct?
7
8
                MR. YOUNG: That's correct.
                MR. HEMPLING: And the test amount for other
9
10
     operating revenues for your test year is 4,262,000. Correct?
11
                MR. YOUNG: That's actually not correct.
12
                MR. HEMPLING: Okay. Help me out.
                MR. YOUNG: That number which, I believe is --
13
                MR. HEMPLING: I'm sorry. Go ahead, please.
14
15
     Clarify it.
                MR. YOUNG: That numbered is referred to our
16
17
     Settlement Agreement but it excludes an amount of 615,000 for
18
     gain on sale.
19
                MR. HEMPLING: All right.
                MR. YOUNG: But we've tried to re-summarize and
20
21
     present that as an attachment to our response to PUC IR 180,
22
     which contrasted with the FERC reported numbers.
23
                MR. HEMPLING: Okay. So the proper comparison is
     the Form 1 for the 2008 calendar year of 6,528,974 is probably
24
25
     compared to the number in the settlement of 4,877,000?
```

```
1
                MR. YOUNG:
                            That's correct.
                                              I might further
 2
     clarify that the formula in 877,000 in the settlement is at
 3
     proposed rates --
                MR. HEMPLING:
                              Right.
 5
                MR. YOUNG: -- just to be clear.
 6
                MR. HEMPLING: Okay. Now in explaining the
 7
     differences in your explanation of PUC IR 178 you referred to
 8
     the fact that, "The estimate for revenue for delinquent
 9
     payments is about $925,000 lower in the 2009 test year."
     Correct?
10
11
                MR. YOUNG: That's correct.
12
                MR. HEMPLING: And why?
13
                Do you think there would be such a decline in
14
     delinquent payments revenue?
15
                            The estimate of delinquent payments for
                MR. YOUNG:
16
     the test year, as shown, the revised estimate as shown in our
17
     response to PUC IR 180 Attachment 1 is $1,226,000.
18
                In the test year that estimate is calculated as a
19
     percentage times the electric revenues estimate at proposed
20
     rates.
21
                MR. HEMPLING: So it's just a historic percentage
22
     times the test year estimate of revenues?
23
                MR. YOUNG: Yes.
24
                MR. HEMPLING: What exactly are delinquent
25
     payments?
```

```
MR. YOUNG:
                            I'd like to ask Mr. Yamamoto, as the
 1
 2
     Customer Service Manager, to respond to that.
 3
                MR. HEMPLING: Well, just exactly what is this
 4
     category about?
 5
                MR. YAMAMOTO: This category entails the amount
 6
     that we received from customers whose payments are delinquent,
 7
     and we charge a 1 percent fee or a 1 percent charge on top of
 8
     their balance, their bill balance that's delinquent.
 9
                MR. HEMPLING: So is this number the sum of the
10
     payment plus charge or is it just the charge?
11
                MR. YAMAMOTO: It's just the charge.
12
                MR. HEMPLING: Okay. Just the charge?
13
                MR. YAMAMOTO: Yes.
                MR. HEMPLING: What has been the test-year
14
15
     experience?
                MR. YAMAMOTO: Actually -- well, the test-year
16
17
     experience is tracking to the estimate that's given that
     1,226,000. I'd like to add that, as of September 30th, 2009,
18
     year-to-date we are tracking at 915,424.
19
                MR. HEMPLING: Sorry, that number again?
20
                              915,424. That is as of September
21
                MR. YAMAMOTO:
22
     30th, 2009, year-to-date.
23
                MR. HEMPLING: So that's consistent with your --
                MR. YAMAMOTO: Yes.
24
                MR. HEMPLING: -- test-year expectation?
25
```

1	MR. YAMAMOTO: Yes, it is.
2	MR. HEMPLING: Now, Mr. Young, back to you.
3	Concerning back to PUC IR 178 a second explanation
4	for the difference between calendar year 2008 and 2009 that
5	concerns the airport Dispatchable Standby Generation, DSG,
6	project. Correct?
7	MR. YOUNG: Yeah.
8	MR. HEMPLING: And you state that in 2008 you
9	reported 625,000 in revenue for that project but our forecast
10	in zero and revenue and expenses for the 2009 test year.
11	Correct?
12	MR. YOUNG: That's correct. I'm sorry, I think
13	those numbers are reversed. In 2008, we reported 652,000.
14	MR. HEMPLING: I think I said that, but I'm with
15	you.
16	MR. YOUNG: Good.
17	MR. HEMPLING: I hope I said that.
18	MR. YOUNG: I'm sorry, I thought heard 625,000.
19	MR. HEMPLING: Oh, I'm sure heard that. I'm sure I
20	made that mistake. I didn't get the years wrong but I got the
21	number wrong. 652,000 in 2008 and zero in 2009 test year
22	MR. YOUNG: Yes.
23	MR. HEMPLING: correct?
24	MR. YOUNG: Correct.
25	MR. HEMPLING: Okay. And what's the explanation

1 for that change? 2 MR. YOUNG: The airport standby generation project 3 is -- was not -- we did not budget any expenses or revenues in the test year 2009 and nor did we budget any revenues or 4 5 expenses for that project in 2008. The revenues are offset by 6 expenses that we incur. We actually bill the project or bill 7 the customer for the expenses that are incurred. 8 MR. HEMPLING: What's the project? 9 MR. YOUNG: It's a Standby Generation Project at 10 the airport. It's a -- my understanding is it's a back-up 11 generator that serves the local load there. 12 MR. HEMPLING: Okay. I'm not understanding. 13 zero, you're saying there's activity in 2009, but it's not 14 been reported in terms of revenue or expenses but it was 15 recorded in terms of revenue in 2008? 16 MR. YOUNG: It was recorded to the account in 2008, 17 yes; and, there are offsetting expenses that were recorded, I believe, to account 546, which is described in our response to 18 19 PUC TR 180. MR. HEMPLING: That was in 2008 you're referring 20 21 to? 22 MR. YOUNG: Yes. 23 MR. HEMPLING: So, once again, why are you putting 24 on both sides of the ledger for 2009 if there's still 25 activity?

```
1
                MR. YOUNG:
                            There are -- the amount -- my
 2
     understanding is the -- there's no dollar amount budgeted for
 3
     revenues and/or expenses. If there are expenses in 2009, they
 4
     will be billed and offset by the revenues; but, in the test
 5
     year estimate, there are no revenues or expenses related to
 6
     the project included in the test-year estimate.
 7
                MR. HEMPLING: Has the Company received any revenue
 8
     from the project this year?
 9
                MR. YOUNG: No, we have not.
10
                MR. HEMPLING: Has it incurred any expenses this
11
     year?
12
                MR. YOUNG: I don't know that for certain.
     understanding is -- I'm sorry, let me leave it at that. I
13
     don't know that.
14
15
                MR. HEMPLING: What I'm understanding is that if
     you incur cost you'll bill for them and then you'll have
16
     revenues to match the costs assuming the recipient of that
17
18
     invoice pays them.
19
                MR. YOUNG: That is correct.
20
                MR. HEMPLING: And, at that point, you would record
     the revenue and the costs?
21
22
                MR. YOUNG: Yes.
23
                MR. HEMPLING: Okay. So we just don't know until
2.4
     the end of the year?
25
                MR. YOUNG:
                            That's correct.
```

1	MR. HEMPLING: And that's the way in worked in
2	2008?
3	MR. YOUNG: As well.
4	MR. HEMPLING: Okay. Now we understand why there's
5	a difference between what was recorded on the Form 1 for 2008
6	versus what is forecasted for the test year for 2009. Now I
7	think we both understand that. Okay. Thank you.
8	Now concerning the 2008 Form 1, I'm going to get
9	these, which refers to excuse me one second.
10	We can go off the record.
11	(Discussion off the record.)
12	MR. HEMPLING: Okay. Back on the record.
13	Mr. Young?
14	MR. YOUNG: Yes.
15	MR. HEMPLING: Concerning the Form 1 for calendar
16	year 2008, can you find page 300 of the FERC Form 1 for
17	calendar year 2008.
18	MR. YOUNG: I have a form. I just need to confirm
19	that it is page 300.
20	MR. HEMPLING: The page numbers are in microscopic
21	print at the bottom of the form.
22	MR. YOUNG: And I believe our copy machine has
23	copied only half of it, but I believe I have the page. Yes.
24	MR. HEMPLING: Are you familiar with line 19 which
25	is entitled Rank From Electric Property?

```
1
                CHAIRMAN CALIBOSO:
                                    Can you confirm you have the
 2
     right page, Mr. Young?
 3
                MR. YOUNG: I do have the right page.
                                                        Thank you,
 4
     Mr. Chairman.
 5
                              Yeah. Are you familiar with the
                MR. HEMPLING:
 6
     line 19 entitled Rank From Electric Property?
 7
                MR. YOUNG: Yes.
 8
                MR. HEMPLING: And the operating revenues
 9
     year-to-date, which would be for the full calendar year, they
10
     are 1,068,624?
                MR. YOUNG: Yes, I see that.
11
                              Yeah. And what items were included
12
                MR. HEMPLING:
     in that line item entitled Rent From Electric Property?
13
14
                Do you know?
                MR. YOUNG: If you will indulge me while I flip.
15
                Generally, the broad categories, they include
16
     revenues related to our rent of properties, including office
17
     buildings, as well as substation sites, they include rent for
18
     parking that is paid for by employees and they also include
19
     rent for telecom facilities that we see.
20
                MR. HEMPLING: Your response to PUC IR 178 -- you
21
22
     qot it?
23
                MR. YOUNG: Yes, I have it.
                MR. HEMPLING: -- refers to one of the substation
24
25
     sites being nonutility property with rent from their property
```

1	properly recorded to their account 418 beginning in 2009.
2	Do you see that?
3	MR. YOUNG: Yes, that's in the response to PUC
4	IR 179.
5	MR. HEMPLING: Okay. I'm sorry, I got you on the
6	wrong one. Okay, in response to 179.
7	Now nonutility property, that means it's not part
8	of the utility revenue requirement or it is?
9	MR. YOUNG: It is not and the property is not
10	included in the estimate of rate base.
11	MR. HEMPLING: So the revenue should not be part of
12	credit to the utility cost of service then?
13	MR. YOUNG: That is correct.
14	MR. HEMPLING: It is not rate base. Correct?
15	MR. YOUNG: That's correct.
16	MR. HEMPLING: That's the way you're treating it.
17	What goes at the substation site and who's paying
18	what for what benefit, if you know?
19	MR. YOUNG: I'm not familiar with the location of
20	the site and what goes on there.
21	MR. HEMPLING: The things somebody learns. I had
22	no idea that you can rent out space on a substation site for
23	somebody.
24	MR. YOUNG: No, I
25	MR. HEMPLING: I assume it's not a camp ground.

```
1
                MR. YOUNG:
                            We use the term "substation site"
2
     rather broadly for many utility sites. It may. I don't if
 3
     it's actually configured as a substation, either currently or
 4
     primarily, or it could be used in the future as a substation.
 5
                MR. HEMPLING: Okay.
                                      Thank you.
 6
                Concerning the other operating revenue totals in
 7
     the FERC Form 1s, my understanding is that for 2000 -- because
 8
     this is -- wait. For calendar years 2006, 2007, and 2008, the
 9
     other operating revenue totals were as follows: 2006,
10
     4,027,498. Correct?
11
                MR. YOUNG:
                            That's correct.
                MR. HEMPLING: 2007, 4,410,392. Correct?
12
                MR. YOUNG:
                            That's correct.
13
                MR. HEMPLING: And 2008, 6,528,974.
14
                            That's correct.
15
                MR. YOUNG:
16
                MR. HEMPLING: Why such a large variation among
17
     these numbers? Any thoughts?
                MR. YOUNG: Perhaps, if I could refer you to our
18
     response to PUC IR 180, Attachment 1.
19
20
                MR. HEMPLING: Go ahead.
                            There from the top half of the page
21
                MR. YOUNG:
     we've attempted to separate and identify some of the details
22
     related to for line 16, 17, 19, and 21 respectively.
23
24
                MR. HEMPLING: Do you expect this type of variation
     in other operating revenue totals to continue for the next two
25
```

1 years? Do you have any thoughts? 2 3 MR. YOUNG: It would be difficult to say. 4 couldn't say what that variation might be. Clearly, if we 5 look at line 16 or at least the total for FERC line 16, 6 between -- if you compare it to 2006 and 2007 versus 2008, in 7 2008, the number is about a million dollars higher, I'm going 8 to speak in millions rounded, that's about 2.4 million versus 9 the 1.3 million in 2007 and, again, 1.3 million in 2006 10 largely due to higher values for late payment fees. 11 MR. HEMPLING: Higher values? What do you mean? 12 MR. YOUNG: Let me speak to that higher values, meaning higher bills in 2008. In 2008, we reached -- because 13 14 of fuel oil prices, high fuel oil prices, which we passed 15 through our energy cost adjust clause, bills, where the 16 average rate and therefor bills related to that fuel cost were 17 as high as we've seen them; particularly, in the August, 18 September, and October period and certainly you could surmise 19 that that contributed to higher late payment fees. 20 MR. HEMPLING: Does the late payment fee compensate 21 companies sufficiently for the time value money plus the cost 22 associated with tracking down delinquent payments? Anybody? 23 MR. YOUNG: Let me start in and Mr. Yamamoto may 24 The late payment fee is -- I believe it's in follow up.

Rule 7 or Rule 8 -- set at 1 percent of the balance.

25

```
1
                Certainly, that 1 percent is probably higher than
 2
     the time value of money or certainly the rate of return that
 3
     we requested in this case. Whether it is sufficient to cover
 4
     the other costs that we incur related to that, I don't know.
 5
                MR. HEMPLING:
                               Anything else, sir.
 6
                MR. YAMAMOTO:
                              At this point, I have nothing to
 7
     add.
 8
                               Okay. Late fees. Late fees are
                MR. HEMPLING:
 9
     different from this delinquent payment charge, is that right;
10
     or, is it the same?
11
                MR. YAMAMOTO:
                              It's the same thing.
12
                MR. HEMPLING: Okay. Do you expect the
13
     deteriorating -- that's a tough word.
                Do you expect declining economic conditions in the
14
15
     State to affect this item?
16
                MR. YAMAMOTO: Well, I'd say I believe it will
     effect it. However, as Mr. Young stated with the increase in
17
18
     2008 of the bills, so this late -- this delinquent payment is
19
     a function of that. It's a 1 percent factor charge times the
20
     bill. So I would say if the bill amounts are lower then, of
21
     course, it will be lower; but, with the declining economy, I
22
     do believe we will see it's the same.
23
                MR. HEMPLING: I'm sorry, you will see what?
24
                MR. YAMAMOTO: I'll see this amount sustaining to
25
     at least to the 2009 level.
```

1 MR. HEMPLING: Well, it works both ways, I quess, 2 if the declining conditions lead to lower sales then that 3 works in one direction but declining conditions lead to people putting off their payment until shutoff is about to arrive but 4 that works in the other direction? 5 MR. YAMAMOTO: That's correct. 6 7 MR. HEMPLING: Have the economic difficulties in 8 the State affected -- Mr. Young or Mr. Yamamoto -- any of the other line items in the other operating revenues category such as the leases, the licensing, telecommunications, and sales to 10 11 third parties? 12 I can speak to one item related to MR. YOUNG: 13 In our forecast -- in our test year estimate of leases. 14 rents, we do have a forecast of rent for -- to Chrysler to use a particular parking lot in Eva Leigh. We have -- Chrysler, 15 16 my understanding is in bankruptcy, and the court -- my understanding is the court terminated the lease effective 1.7 18 April 30th. 19 My understanding, from our land people, is that we 20 did collect the January 2009 rent but -- and we are pursuing 21 but have not collected rent for February, March, and April of 22 2009 and, of course, the property is now vacant and unleased 23 at this point. 24 MR. HEMPLING: So that's one example? 25 MR. YOUNG: Yes.

```
1
                                Any other examples?
                MR. HEMPLING:
 2
                MR. YOUNG: Not that I'm aware.
 3
                MR. YAMAMOTO:
                               I'm not aware.
 4
                MR. HEMPLING: Excuse me a second.
 5
                 (Whereupon, Mr. Hempling briefly confers with the
 6
     Commission.)
 7
                CHAIRMAN CALIBOSO: All right. That's all we have
 8
     for this panel.
 9
                Would the parties like to ask questions of each
10
     other?
11
                MR. KIKUTA: Hawaiian Electric has no questions.
12
                MR. ITOMURA: The Consumer Advocate has no
13
     questions.
14
                MR. MCCORMICK:
                                 The Department of Defense has no
15
     questions.
16
                CHAIRMAN CALIBROSO:
                                      Thank you.
                I quess we'll move on to the next panel,
17
18
     Mr. Hempling.
19
                Are there any changes in the panel?
20
                MR. KIKUTA:
                              Yes.
                CHAIRMAN CALIBOSO: Mr. Kikuta, witnesses?
21
22
                MR. KIKUTA:
                             Thank you, Mr. Chairman.
23
                Robert Young will be our panelist for Panel 10.
24
     He's, again, the Director of the Pricing Division for Hawaiian
25
     Electric; and, we also have Paul Fetherland available as well.
```

1	CHAIRMAN CALIBOSO: Thank you.
2	Mr. Itomura?
3	MR. ITOMURA: For Panel 10, the Consumer Advocate
4	has Mike Brosch and Steve Carver as witnesses.
5	CHAIRMAN CALIBOSO: Thank you.
6	MR. MCCORMICK: The Department of Defense has no
7	additional witnesses.
8	CHAIRMAN CALIBOSO: Thank you.
9	Go ahead, Mr. Hempling.
10	MR. HEMPLING: Thank you, Mr. Chairman.
11	This panel on rate design, our general goal is to
12	understand a couple of things; one, is why there's such a
13	small level of activity in terms of customer adoption of the
14	existing time-of-use rates; and, secondly, to understand how
15	the Company arrived at its proposals for the new rate
16	structures, both the time-of-use and the more general rate
17	structures; so, that the purpose of these sets of questions is
18	to explore those areas.
19	So who's going to speak to the time-of-use
20	residential rates, TOU-R rates?
21	MR. KIKUTA: That'll be Mr. Young.
22	MR. HEMPLING: Okay. I'm having a sense of
23	deja vu. I know we talked about some of this in a prior panel
24	so.
25	MR. YOUNG: If it pleases you, Mr. Hempling, we did

1	discuss it in our employee discount
2	MR. HEMPLING: Right.
3	MR. YOUNG: discussion
4	MR. HEMPLING: Right.
5	MR. YOUNG: two days ago.
6	MR. HEMPLING: So there might be some overlap, but
7	I'm not doing it now for the purposes of comparison to the
8	employee discount, but for purposes of understanding better
9	how these things were designed.
10	MR. YOUNG: I understand.
11	MR. HEMPLING: I apologize for some overlap here.
12	Now can you go over with us, again, the reasons why
13	you're proposing to change from three periods off-peak,
14	mid-peak, and priority peak to the two periods off-peak and
15	on-peak and I'm referring to time-of-use residential.
16	What were the reasons?
17	MR. YOUNG: If you'll indulge me a second.
18	MR. HEMPLING: Yes, sir.
19	MR. YOUNG: Thank you. For the time, I'll speak
20	from my testimony for reference that's HECO direct testimony,
21	HECO T-22, page 43.
22	There were generally two goals considered in the
23	modification of the on-peak, time-of-use rating periods
24	proposed for schedule TOU-R moving from three periods to two.
25	The proposal, which has an on-peak period of 3 p.m.

1	to 8 p.m. every day and an off-peak period of 8 p.m. that
2	night to 3 p.m. the following day, that modification still
3	captures the majority of the evening peak hour usage in the
4	on-peak hours while the evening hours excuse me while
5	the evening hours to the off-peak where people are normally
6	awake in order to allow customers to shift energies to the
7	off-peak hours; and, we believe that revised proposal
8	accomplishes both goals.
9	MR. HEMPLING: Mr. Young, thank you. It was very
10	clear.
11	Can I get a better understanding of the process the
12	Company goes through, the process the Company went through, to
13	make this decision.
14	First of all, what's your role with respect to rate
15	design, your role within the Company?
16	MR. YOUNG: As the Director of the Pricing
17	Division, we are charged with developing rate design
18	proposals, both for regular rates, as well as optional rates.
19	These of course, these proposals are developed internally
20	and do need to be approved at levels above me in the Company.
21	MR. HEMPLING: Well, I want to understand that
22	better.
23	So the concepts originate with you or does your
24	department get direction from somewhere else or guidance from
25	someplace else in the Company before you engage in rate

1	design?
2	MR. YOUNG: Actually, both approaches do occur.
3	MR. HEMPLING: So in this
4	MR. YOUNG: in the instance of the revision to
5	the schedule time-of-use rate revisions proposed in the 2009
6	rate case the design concept came to us.
7	MR. HEMPLING: From?
8	MR. YOUNG: From one of the executives in the
9	Company.
10	MR. HEMPLING: Well, let's get clearer.
11	Who gave you the dimensions and what kind of
12	instructions did they give you?
13	MR. YOUNG: The guidance for the revision to the
14	Schedule TOU-R was to create the two-period rate instead of
15	the three-period rate and elongate or stretch the difference
16	in pricing between on-peak and in off-peak hours to encourage
17	customer response.
18	MR. HEMPLING: Okay. And where did that guidance
19	come from?
20	MR. YOUNG: That came from that came from the
21	senior vice president for our area.
22	MR. HEMPLING: Who is?
23	MR. YOUNG: Dr. Carl Staukoff; now retired.
24	MR. HEMPLING: And did he describe what his goals
25	were in giving you this guidance in any more specific terms

```
than you had just described?
 1
 2
                MR. YOUNG:
                            No.
 3
                MR. HEMPLING: Anybody else in the Company involved
     in this decision as to what the rate design should be for
 4
 5
     TOU-R besides Mr. Staukoff?
 6
                MR. YOUNG: Dr. Staukoff, yes.
 7
                               Dr. Staukoff.
                MR. HEMPLING:
 8
                Anybody else involved in this?
 9
                MR. YOUNG: Included in the process where the
10
     people in the organization who are between me and Dr. Staukoff
11
     that would have included the Manager of Energy Services and
12
     the Vice President of Customer Relations -- customer -- I'm
13
     uncertain of the title.
14
                MR. HEMPLING: And who are those people?
15
                MR. YOUNG: The Manager of Energy Services is
16
     Mr. Alan Hee, who has appeared before you in this hearing.
17
                MR. HEMPLING:
                                Yes.
                                     And?
                MR. YOUNG: The Vice President is Mr. David Muller.
18
19
                                Is this the first time you've been
                MR. HEMPLING:
20
     involved in adjusting the time-of-use rate schedule?
21
                MR. YOUNG: This -- I would say this is the first
     time that we revised an existing time-of-use rate or rate
22
     proposal; although, I've been involved in designing the
23
24
     time-of-use rate options that we do have.
25
                MR. HEMPLING: All right. And what was the
```

1 specific reason for going from three to two periods, given by 2 anybody who was involved in the process when they were giving 3 you quidance? 4 MR. YOUNG: Again, a simpler form rate was believed 5 to be easier to understand, easier to use and easier to 6 access; and, with two periods, it was -- the goal also was to 7 create a larger price differential, which was thought to --8 which was anticipated to have a greater response on the part 9 of customers. 10 MR. HEMPLING: So there was a concern that there 11 was an insufficient response under the pre-existing TOU-R 12 regime? 13 There was concern that the three-part MR. YOUNG: 14 TOU-R would have -- would not have as great a response as the 15 two-part TOU-R. If I can frame the chronology for you a little bit. We filed this proposed revision to the TOU-R in 16 17 the 2009 test-year rate case was filed, which was filed in 18 July. 19 MR. HEMPLING: July of? MR. YOUNG: I'm sorry, July 3rd, 2008. 20 21 MR. HEMPLING: Yep. 22 MR. YOUNG: And so we were doing this design and development work approximately in the spring of 2008. At that 23 24 point, in the spring of 2008, our initial time-of-use rate 25 proposal, Schedule TOU-R, which was initially proposed in the

```
2005 rate case, had not yet received final approval; so, it
1
     was not actually in place at the time we were doing this
2
 3
     revised design planning.
                MR. HEMPLING:
                               The part that the -- the proposal
 4
 5
     that you're saying is not in place was the three-part, the
 6
     three-tier -- the three-period proposal?
                            The three period proposal -- the three
 7
                MR. YOUNG:
     period rate that is currently in effect has only been in
 8
     effect since June 20th, 2008.
 9
                MR. HEMPLING: Do you use the word "period" rather
10
     than tiers to refer to the times of day?
11
                MR. YOUNG: Yes, I use periods for time of day and
12
     tiers are usage related to our Schedule R, if we to get that
1.3
     discussion.
14
                MR. HEMPLING: So tiers and blocks are synonyms for
15
16
     you?
17
                You're talking about --
18
                MR. YOUNG: Yes, yes, thank you.
                MR. HEMPLING: -- tiers and blocks are synonyms
19
     because they refer to the quantity of kWhs consumed in a
20
21
     months?
22
                MR. YOUNG:
                             Yes.
                MR. HEMPLING: And periods refer to the different
23
     times of day which have different rates?
24
25
                MR. YOUNG:
                             Yes.
```

1	MR. HEMPLING: Okay. So we'll use the same terms.
2	MR. YOUNG: Thank you.
3	MR. HEMPLING: Believe me, thank you.
4	Now let me get to the point here. Again, what was
5	the reasoning used within the Company excuse me.
6	You gave us the reasons that two periods would be
7	simpler than three and that going from three to two will
8	enable you to have a larger price differential between the two
9	period prices. Correct?
10	MR. YOUNG: Let me clarify that last point that two
11	periods would be simpler and a larger price differential
12	between the on-peak and off-peak rates was believed to
13	encourage a greater customer response.
14	MR. HEMPLING: Greater than what?
15	MR. YOUNG: Greater than a a greater response
16	than a three-period, time-of-use rate form would have.
17	MR. HEMPLING: Okay. So you're referring to
18	you're not referring yet to the very tiny number of customers
19	that were participating at all in the time-and-use program?
20	MR. YOUNG: At the point they were having this
21	discussion, there are time-of-use rate options available.
22	MR. HEMPLING: So what was, again, the differential
23	that you folks thought would be necessary to produce a
24	response would be the differential that we're now seeing in
25	the proposed TOU-R, which is the differential between the

```
1
     43.211 cents for kWh for on-peak, and the 22.2113 cents for
2
     kWh that we see for the off-peak TOU-R; is that correct?
 3
                That's the differential you're referring to --
                MR. YOUNG: Yeah, that's the --
 4
 5
                MR. HEMPLING: -- sir?
                MR. YOUNG: -- differential that is proposed.
7
                In our rate design discussions we did not specify a
8
     target differential; although, we were aware that our
 9
     differential in our proposed -- in our three-part proposed
     TOU-R rate form was 8.5 cents between the highest rate and the
10
     lowest rate, and it was felt that the differential should be
11
12
     significantly greater than that.
                MR. HEMPLING: Okay. It was felt by Dr. -- how do
13
14
     pronounce it?
15
                MR. YOUNG: Staukoff.
16
                MR. HEMPLING: Staukoff, that's the person that was
17
     having the feeling?
18
                MR. YOUNG:
                            Yes.
19
                MR. HEMPLING: Do you know whether he based that on
20
     any study of Hawaii or other customers?
21
                MR. YOUNG: I believe that his -- my understanding
22
     is that he had that preference based on some discussions with
23
     others outside the Company. I'm sorry, I can't --
24
                MR. HEMPLING: That's all right. I'm sure the
25
     lawyers --
```

1 MR. YOUNG: -- define those. 2 MR. HEMPLING: -- are noticing we're into triple 3 hearsay here, but it's an administrative procedure so it's 4 okay. 5 So the only person the Company who's given serious 6 thought to the magnitude of rate differentials necessary to 7 stimulate customer behavior change is somebody who's retired? 8 There's nobody else in the Company guiding you 9 these days, Mr. Young, on this subject? 10 Those of us who are involved in the MR. YOUNG: 11 rate design process continue to work on rate design 12 developments and consult with others in the Company on rate 13 design. 14 The difficulty with this particular planning 15 effort, if I could call it that, for schedule TOU-R is that it 16 did not have the three-part -- three period -- I'm sorry. 17 We did not have the three-period optional rate form 18 in place; so, it was difficult to assess its success or degree 19 of success or response, even as we considered a two-period 20 alternate form. 21 Your job in the Company does not MR. HEMPLING: 22 focus on measuring customer responsiveness to price 23 differences, your job in the Company instead focuses on giving 24 parameters told to you by others, your job is design rates

that produce the necessary revenues for the Company, is that

25

1	correct, or have I understated your role
2	MR. YOUNG: That's
3	MR. HEMPLING: with respect to rate design?
4	MR. YOUNG: Generally speaking, that's correct in
5	our role for rate design.
6	MR. HEMPLING: I'm not meaning to lower your status
7	in the Company. I just want to understand what your area of
8	expertise is.
9	MR. YOUNG: That's correct.
10	MR. HEMPLING: So who in the Company guides the
11	process now of determining what magnitude price differential
12	will produce a particular customer response?
13	Who's the person with that responsibility?
14	MR. YOUNG: I don't believe that there's any
15	individual who is currently has that specific
16	responsibility individually. That responsibility area
17	probably falls to me and my manager Mr. Hee.
18	MR. HEMPLING: By whom do you go to when you want
19	to really understand what works to drive customers' usage in
20	particular directions?
21	Whom do you rely on?
22	MR. YOUNG: Right now, if we had or if we had a
23	rate in place or if we were looking at a particular rate, we
24	generally get some data or data analysis from our sister group
25	which is a group responsible for research, but I don't want to

```
overstate their role.
 1
 2
                MR. HEMPLING: I don't think you're having that
 3
     problem.
               Go ahead, sir. Sorry.
 4
                MR. YOUNG: Generally, we're giving basic
 5
     statistics from them, you know, a number of customers, number
 6
     of bills, and kWh, and kW over particular time periods,
 7
     averages, medians.
                MR. HEMPLING: So the TOU-R rate schedule has been
 8
 9
     in effect as of when?
10
                MR. YOUNG: On Oahu, it's been in effect since
11
     June 20th of 2008.
12
                MR. HEMPLING: And it's an optional program, opt-in
13
     practical?
14
                MR. YOUNG: It's an opt-in program, yes.
15
                MR. HEMPLING: And there are seven customers who've
     opted in?
16
17
                MR. YOUNG: Currently, yes.
18
                MR. HEMPLING: Okay. Do you have any idea why such
19
     a small number -- or excuse me.
20
                And you've set things up to accommodate a thousand
21
     TOU-R customers, correct, that's what the schedule is limited
22
     to and that's what the Company is capable of accommodating?
                MR. YAMAMOTO: We believe that we're capable of
23
24
     accommodating a thousand customers without a billing system
25
     that can do that automatically.
```

1	MR. HEMPLING: So are you aware of any
2	conversations in the Company of a head scratching nature as to
3	why there are plans to have a thousand; yet, only seven have
4	opted in?
5	Any conversations that you're aware of about why?
6	MR. YOUNG: Actually, no, not that I'm not aware.
7	MR. HEMPLING: Are you curious about it?
8	MR. YOUNG: Personally, I thought there might be
9	more, but I'm not surprised that there aren't hundreds of
LO ,	customers.
L1	MR. HEMPLING: Why are you not surprised?
L2	MR. YOUNG: The time-of-use rate or the time-of-use
L3	rate options that we proposed and had approved in the 2005
L4	rate case are prices set to present a challenge to customers,
L5	and the challenging opportunity, and the opportunity is to
L6	lower bills, and the challenge is to change or move energy
L7	usage in order to get that bill savings; so, there isn't
L8	what we've tried to do in the rate design is set rate the
L9	level such that customers have to move kWh from a higher price
20	period to a lower price period or even conserve absolutely and
21	reduce their consumption in order to save on their bill.
22	That's difficult for many customers. For many
23	customers okay, now, this is continuing with my
24	understanding, so it's a personal opinion.
25	Customers are not always aware of their actual

```
1
     level of usage, even what devices or appliances actually use
2
     energy more intensively than others; so, there are many
3
     challenges for a customer to successfully use these rates;
     and, quite frankly, electricity bills relative to other
 4
 5
     activities in the normal day-to-day life may not have a high
 6
     priority for many customers; but, the time-of-use rate does
7
     present an opportunity for those who wish to try and take it
8
     up.
 9
                MR. HEMPLING: Well, the first thing that has to
     happen is the customer has to know that this rate differential
10
11
     of 21 cents between the two periods exist. Correct?
                MR. YOUNG: That's correct.
12
                MR. HEMPLING: And is this opportunity to face this
13
14
     different presented to the customer in their monthly bills?
15
                I can rephrase it.
16
                In the monthly bill that they receive is there a
     notice that identifies this differential as an option?
17
                MR. YOUNG: Certainly, now that the rate is in
18
19
     place, no, we don't regularly alert customers of that
20
     opportunity.
                MR. HEMPLING: Well, how are they supposed to know
21
22
     it exist other than having the joy of attending these
23
     hearings?
24
                 (Laughter.)
25
                            We do have HECO.com website which
                MR. YOUNG:
```

1	discusses energy opportunities, including rates for customers,
2	and they can find the rates there. I do believe that
3	MR. HEMPLING: Hold on one second.
4	How many customers do you think went out of their
5	way to go to your website to find out if you had this rate
6	schedule?
7	MR. YOUNG: I don't know.
8	MR. HEMPLING: What would you think, a small or
9	large number?
10	MR. YOUNG: If less than a thousand is small, it
11	would be small.
12	MR. HEMPLING: Okay. I interrupted you.
13	What else would you say were the other ways in
14	which a customer could find out that this 21 cent per kWh rate
15	differential existed?
16	How would they learn that besides going to the
17	website?
18	MR. YOUNG: I'm sorry. The existing differential
19	is 8.5 cents.
20	MR. HEMPLING: I'm sorry.
21	MR. YOUNG: The 21 cents is the proposed rate.
22	MR. HEMPLING: Pardon me. Thank you.
23	MR. YOUNG: But, in any case, we also have
24	customers who call our phone center; and, when they inquire
25	about what they can do about their bill, they are advised of

```
1
     that --
2
                MR. HEMPLING:
                                They are?
3
                MR. YOUNG: -- option.
 4
                MR. HEMPLING:
                                They're to go to the --
5
                            I can't --
                MR. YOUNG:
 6
                MR. HEMPLING:
                                -- web -- I assume they're told to
 7
     go to the website?
8
                            Well, they're told about the rate now.
                MR. YOUNG:
 9
     That's my understanding is that they were told about the rate,
10
     whether that's a consistent presentation that's made by all of
11
     our phone center reps, I'm not going to represent to you that
12
     I know that.
13
                               Anything else?
                MR. HEMPLING:
                Any other ways in which a customer would become
14
     informed of the -- sorry -- the existing 8-cent differential?
15
16
                            They don't come to mind right now.
                MR. YOUNG:
                MR. HEMPLING: Well, with this type of outreach,
17
     it's impressive you got seven people that opted, wouldn't you
18
19
     say?
20
                MR. YOUNG: I would have thought that we'd have
21
     more than seven.
22
                MR. HEMPLING: Why would you think you'd have more
     than seven if the only ways that somebody would learn about it
23
24
     would be by going on the website or calling into the phone
25
     center?
```

1	Why would you think you'd get more than seven?
2	MR. YOUNG: That's just a personal assessment. If
3	we had had 260,000 customers, I would have thought we had some
4	interest, even if it is motivated by or self-driven by
5	individual consumers.
6	MR. HEMPLING: Okay. Are you aware of plans within
7	the Company to modify the methods of notifying customers of
8	the TQU-R rate differential upon the implementation of the
9	proposed TOU-R schedule?
10	MR. YOUNG: We have not made plans for that at this
11	time.
12	MR. HEMPLING: Would you personally have heard
13	about them if there were such plans?
14	MR. YOUNG: I believe I would.
15	MR. HEMPLING: Are you familiar with the schedule
16	for the CIS system completion?
17	CIS stands For Customer Information Service.
18	MR. YOUNG: No, I'm not.
19	MR. HEMPLING: So you don't know whether the CIS or
20	some other system would be completed excuse me.
21	We've already said that the 1,000 residential
22	customer limit proposed
23	MR. YOUNG: Actually, that limit is existing in
24	the exist in the existing schedule TOU-R
25	MR. HEMPLING: Thank you. And we're also

1	MP VOUNCE and the property that limit
Τ	MR. YOUNG: and the proposal repeats that limit.
2	MR. HEMPLING: Okay. And that limit is related to
3	the nonexistence of a new CIS system; is that correct?
4	MR. YOUNG: That's correct.
5	MR. HEMPLING: And we don't know when a new CIS
6	that could accommodate a larger number will be in place?
7	MR. YOUNG: I am not aware of that.
8	MR. HEMPLING: Would you be aware if anybody were?
9	MR. YOUNG: I wouldn't be the first. Maybe I would
10	at some point.
11	MR. HEMPLING: Well, they'll come to you, right,
12	because it would accommodate a larger it would accommodate
13	a larger number of customers who could use the rate design,
14	which comes under your domain, so they would come to you.
15	Correct?
16	MR. YOUNG: They would, I believe yes, they
17	would advise me that we would be able to lift the meter limit
18	requirement as we had represented we would once the CIS system
19	was in place.
20	MR. HEMPLING: Do you know what the new number with
21	respect to eligibility for the TOU-R rates will be under the
22	new CIS?
23	Do you know what the new CIS system will
24	accommodate in terms of the maximum number of residential
25	customers?

1	MR. YOUNG: I'm not aware that there will be a
2	maximum. Our understanding and this goes back to the
3	design in the 2005 case, that when a new CIS system will be in
4	place, it would be able to accommodate all customers who chose
5	to be on that rate option.
6	MR. HEMPLING: So your understanding is that when
7	the new CIS system is in place you would lift the 1,000 you
8	would propose to lift the 1,000 customer limit in schedule
9	TOU-R?
LO	MR. YOUNG: That's correct.
L1	MR. HEMPLING: Do you know with respect to the
L2	seven do you know whether anybody in the Company has
L3	studied differences in load profile between those customers
. 4	who have opted in TOU-R and the customer group that takes
L5	under Schedule R?
L6	Do you know if anybody has looked at customer
L7	differences?
L8	MR. YOUNG: My understanding is that no one has
L9	studied those differences.
20	MR. HEMPLING: Either in terms of peak demand
21	differences or aggregate monthly consumption differences?
22	MR. YOUNG: No.
23	MR. HEMPLING: Do you know whether anybody in the
24	Company has seen whether customer behavior among the seven has
25	changed as a regult of their opting into TOU-R?

1	MR. YOUNG: We have not studied that.
2	MR. HEMPLING: So you know for sure that you
3	have not it's not that you're not aware of any studies,
4	you're sure there have not been?
5	MR. YOUNG: I'm fairly certain that we have not
6	studied that.
7	MR. HEMPLING: Can we turn to thank you for your
8	responses to this, Mr. Young.
9	Can we discuss now TOU-C and TOU-G rates?
10	COMMISSIONER KONDO: Mr. Hempling, can I ask some
11	questions about TOU-R?
12	MR. HEMPLING: Yes, sir.
13	COMMISSIONER KONDO: I'm going to follow up with
14	some answers that you made to Mr. Hempling that I'm not sure I
15	fully understand.
16	You had said that the CIS it's your
17	understanding that once the Company has the CIS that it will
18	be able to accommodate all residential ratepayers that want to
19	participate under the time of these rates; is that correct?
20	Do I understand that correctly?
21	MR. YOUNG: Commissioner Kondo, I didn't say that.
22	I could clarify and be more specific, if I may.
23	When I made that statement, what I mean is that we
24	will be able to bill automatically all customers who want to
25	sign up on the time-of-use rate option.

1	COMMISSIONER KONDO: Is there a different meter
2	required or is it the same meter as long as you now have a
3	more advanced CIS type of system?
4	MR. YOUNG: The CIS system or at least of the
5	capabilities that I refer to in the CIS system are just the
6	billing portion of the system. Time-of-use data still needs
7	to be acquired at the customer location and transferred into
8	the billing system; so, it does if the customer is not yet
9	a time-of-use rate customer, it does require a different meter
10	and a different tracking of data.
11	COMMISSIONER KONDO: What is the Company's
12	expectation as to the participation in the current TOU-R
13	program?
14	Assuming that it continues the current TOU-R
15	schedule that continues, what does the Company anticipate in
16	terms of participation?
17	I know you have seven now, but does the Company
18	have some expectation as to the number of participants?
19	MR. YOUNG: As this is an operation rate, the
20	Company has not taken it upon itself to forecast that
21	participation.
22	COMMISSIONER KONDO: Would that answer be the same
23	with respect to proposed TOU-R rate?
24	MR. YOUNG: That's correct.
25	COMMISSIONER KONDO: I'm not sure you answered this

```
1
     question to Mr. Hempling, but does the Company know how much
 2
     energy the average Schedule R uses or consumes during the peak
 3
     period?
 4
                And I know that the Company had provided an IR
 5
     response. I think it's PUC IR 151 and there was a chart
 6
     attached to that, and I wasn't sure if that was supposed to
 7
     represent that information.
8
                MR. YOUNG:
                            Thank you, Commissioner Kondo.
 9
     me --
10
                COMMISSIONER KONDO: And I'm referring --
11
                MR. YOUNG: -- reply -- go ahead.
12
                COMMISSIONER KONDO: I was going to say I'm
13
     referring to Attachment 2 and it's actually PUC IR 104.
14
                MR. YOUNG: I sorry, PUC IR?
15
                COMMISSIONER KONDO: No, I take that back.
                                                             It's
16
     151.
17
                MR. YOUNG: Okay. There are a couple of things
18
     that we put together to put together a response to PUC IR 151,
19
     and let me describe it.
20
                First, we referred to the average residential
21
     customers usage in 2008, 554-kilowatt hours. We've discussed
22
     that in relation to the employee discount issue a couple of
23
     days ago.
24
                In terms of trying to identify how or estimate how
     much of that usage is in the proposed on-peak period in this
25
```

proposed TOU-R rate in test year 2009, this 3 p.m. to 8 p.m. period every day, we went back to -- to respond to this IR, we went back to our class load study data and our sample of Schedule R customers in that 2003 study and did a proportional calculation of the kWh in those hours for those sample customers, and that's the 26.6 percent from the class load study data. We're saying based on that data, about 26.6 percent of energy is used in this 3 p.m. to 8 p.m. period.

COMMISSIONER KONDO: Do you expect that percentage to have changed today versus the study that was performed in 2003 in terms of percentage of energy the residential customer uses during peak versus the off-peak?

MR. YOUNG: I couldn't estimate that for you. We do have a class load study that was, I believe, fielded in 2008 or in 2009, and we are in the process of completing a new class load study; so, we would be able, at that point, to look at that data and see, in fact, if that is different for residential and really all other customers.

COMMISSIONER KONDO: Of the 26.6 percent of residential kWh that this study had estimated was consumed during the on-peaks periods, does the Company know the percentage of that amount that is discretionary energy use?

And what I mean by that is things that turn on and off versus things that you have to leave on 24/7 like you have

a refrigerator, for instance?

MR. YOUNG: My understanding is that the class load study measures usage just by time interval and not its source; so, no now we're not aware of how much of that use might be discretionary as you described.

COMMISSIONER KONDO: From that answer, I take it you're not able to tell me what the expected residential savings would be either on the current TOU-R rate or the propose TOU-R rate if a residential users shifts his use to the off-peak period from the on-peak period because you don't know what the discretionary mode is; is that correct?

MR. YOUNG: We would be able to -- for a given set of estimates, if we were to establish or assume a starting point for a residential customer of how much, how many kWh they had in an non-peak period and in an off-peak period before modifying behavior and then if we had an estimate of how much they moved, we would be able to estimate how much they save, that may not be what you're asking.

COMMISSIONER KONDO: It's not but I appreciate the challenge in trying to answer the question.

I have a question about the period in which it's proposed the on-peak rate start, 3 p.m. When I look at load profile it seems like 3 p.m. is not the beginning of the peak.

Could you comment as to why the Company proposes to the peak rate at 3 p.m. versus a later time, for instance,

like 5 p.m?

MR. YOUNG: I think the choice of 3 p.m. to 8 p.m., again, as we described in our direct testimony, was to try and capture and designate as on-peak hours, hours that included the period of highest use. One of the challenges, of course, is if there are -- if you start later, the on-peak period might be -- might extend to long through an evening period and make it less accessible and less useful.

Let's use the example of we have proposed a five-hour period from 3 p.m. to 8 p.m. If we kept the same five-hour, on-peak period but instead started it at 5 p.m. and terminated it at 10 p.m., we believe the usability of that rate option might be diminished. It would require, for example, for homes that don't have air conditioning usage so their primary electric intensity use is hot water, in order to manage usage from on-peak to the off-peak period, it means deferring, perhaps, hot water usage, which includes baths for the kids, cooking, washing of dishes, washing laundry to outside of the on-peak period we believe that it might be much more difficult and much more challenging for customers to try and do that after 10 o'clock at night.

So the existing three-period, time-of-use rate option has a priority peak period from 5 p.m. to 9 p.m. of which has been, I might add, a common, historic priority peak period that we've used in our Rider M containment option for

over 20 years, but we felt that even 9 p.m. was too late and that's why we tried to bring that on-peak period back to 8 o'clock.

The other thing I wanted to add is the other challenges if the on-peak period is shortened even further than five hours, then the pricing has to be different -- the differential between the on-peak and off-peak has to be narrowed because it becomes too advantageous.

We want to get customers to change behavior. We don't want them to be able to save and take this rate option without changing behavior and still be able to save. We want to avoid a -- we call it a "free rider challenge" where you don't get the behavior changed but the customers get the reward. We're trying to avoid that.

COMMISSIONER KONDO: So you're saying that if you shorten the period from 5 p.m. to 8 p.m., three hours instead of the current proposed five hours, that will not result in the same type of behavioral change that the Company is looking to achieve?

MR. YOUNG: What I'm suggesting is that we're not sure that we'll get the same behavioral change, but the pricing differential between the on-peak and the off-peak would have to be narrowed; and, our assumption, at least in this proposal, is that a wider differential between on-peak and off-peak encourages the change; so, a shorter on-peak

period would be a narrower differential between off-peak and on-peak energy rates may prove less attractive or may cause customers to be less responsive to the rate option.

explain to me why the Company chose to design the time-of-use rates where the on-peak rate is so much higher than the normal Schedule R rate for that period and the incentive or the off-peak use is actually just a fraction, 4 cents, less than the current Schedule R rates, versus some type of reverse type of scenario where you truly have a carrot, meaning a much significantly lower rate during the off-peak period to incentivize customers to use electricity during the off-peak period rather than penalizing them for using it during the on-peak period?

Can you explain why it was chosen to do, what I would call the penalty way, rather than the incentive way?

MR. YOUNG: This relates to my previous response

18 and let me try to expand further.

The challenge with an optional rate that's very attractive is that, again, you don't want the rate to be so good that all customers will sign up for that rate, not change any behaviors, and still get a savings that becomes a revenue change and, of course, doesn't get you any changes in behavior that you might seek from an option rate.

So it's a balancing of -- it's a balancing of

1 creating an opportunity but not creating so rich an 2 opportunity that customers benefit without changing any behaviors --3 4 COMMISSIONER KONDO: The opposite --MR. YOUNG: -- and we would be -- the balancing is 5 6 when you shorten -- and this was the goal here -- shorten the 7 on-peak hours in order to try and create a wider opportunity 8 around the o'clock for off-peak hours, it requires that kind of -- if I can, asymmetric kind of pricing, whereas if you had 10 more on-peak hours and less off-peak hours, the pricing 11 relationship would be different; but, at the same time, as 12 we've just discussed, the opportunity to shift from on-peak to 13 off-peak might be more difficulty and more challenging. MR. HEMPLING: May I have one second, Commissioner? 14 One of the constraints you have is when the dust 15 clears the rates in effect times the kWhs is used as to sum up 16 to revenue the requirement allocated to the class, correct, 17 18 and that's one of the constraints in setting the rates? 19 MR. YOUNG: That's one of the constraints in 20 setting the regular rates. I would point out in this test year, as we've described in our response to IR -- PUC IR 150, 21 22 we don't estimate participation from our option time-of-use 23 rates that doesn't already exist. 24 MR. HEMPLING: So you're not allocating costs to this TOU-R class separately from the costs you allocated to 25

the rest of the residential rates?

MR. YOUNG: That's right.

MR. HEMPLING: Sorry.

COMMISSIONER KONDO: I just asked the question,
Mr. Young, because it seems like you developed or created a
system where you have very little participation and, frankly,
if I look at the incentive versus the penalty, I'm not sure
that I would opt in; and, I think that you want to incentivize
people to opt in.

And so I'm asking questions about the thought that went into it, and I understand your response, you don't want some free riders, but, it seems, to me, the program that you're asking the Commission to continue is not one that there's enough of a carrot out there, you know, it's really one where there's a big penalty out there; so, why would I opt in if the big incentive is don't get whacked.

And so, I guess, I'm just struggling to understand why the rates that are currently set that it's a program that had value because it seems like you only have seven after a year or see of participation; and, like I said, if I look at the program, I'm not sure I would want the risk of having a huge penalty, and I know there's some energy users that I cannot not use during a peak period.

Anyway, no, I don't have a question. I just wanted to say that.

1 CHAIRMAN CALIBOSO: Can I follow up? 2 COMMISSIONER KONDO: Sure. 3 CHAIRMAN CALIBOSO: Mr. Young, and this is still a 4 pilot program, right, it's been limited to a thousand? 5 MR. YOUNG: The schedule TOU-R is actually -- our 6 understanding is it's an approved regular rate option. 7 does in the tariff have a cap, a participation cap. CHAIRMAN CALIBOSO: And the participation cap is? 8 9 MR. YOUNG: Is 1,000 units. 10 CHAIRMAN CALIBOSO: One-thousand. 11 One-thousand. MR. YOUNG: 12 CHAIRMAN CALIBOSO: So what is your risk of having 13 too many people sign up? 14 MR. YOUNG: At this point, it would be a thousand 15 If, in fact, the rate were such that it were too 16 attractive and would get customers who would sign up just to save money without changing behaviors. 17 18 CHAIRMAN CALIBOSO: Right. But are we trying to, 19 at this point, at least, get a little more data as to what 20 customer behavior would be given the proposed rates that you are proposing here, the time-of-use rates, given that we have 21 22 very little experience so far. And I think I hear one of your 23 concerns about perhaps making it more attractive to get more people to sign up is that you may have too many people sign up 24 25 and, you know, perhaps they're going -- you might get free

riders, but you don't know that until you get people to sign up. It seems, though, like you have a cap on the number of participants, number one, already built in to protect against any major adverse consequences on revenues but, at the same time, you're designing the program where it might not -- you might not get hardly any participants.

MR. YOUNG: Certainly, we would be open to taking a certain approach for this proposed rate where if the rate were approved in this case by this Commission, we would take -- we could take a more aggressive approach in disseminating information, making customers aware of the rate, and we could, in fact, assess that participation with -- assess that participation in this optional rate with the intended result of making refinements to that optional rate in a future rate case or even before that.

It's difficult, at this point, to see how customers assess, as Commissioner Kondo has pointed out, there's a large price differential for consumption on the on-peak rate because it's for a part small of the day; admittedly, it's certainly an important part of the day, but it's a small part of the day and that has to be weighed against the much wider time opportunity to use energy in the off-peak period; admittedly, it is smaller discount, and, you're right, it's not clear how customers will respond to that and certainly we're presenting that opportunity.

CHAIRMAN CALIBOSO: Thank you.

COMMISSIONER KONDO: Just to follow up on what you just said. And I understand that when Mr. Hempling's comment was that when the dust settles, you got to make x amount of money.

But isn't the challenge here the fact that there is the cap, and I understand your concern about free riders, but we got free riders in every program that the Company implements; but, if the program is more universal, then, yeah, the free riders might be a small percentage of the participants, but, hopefully, you get a large group of folks that get in there and are incentivized to shift their use of energy which thereby lowers the peak and shifts the Company's peak or shaves the Company's peak.

Isn't that the issue here as to why this is the program that you to have because of the cap?

You have to have the penalty stick rather than the incentive carrot?

MR. YOUNG: The cap or at least the cap is an administrative or at least originates with our proposal in the test year 2005 rate case, where the three-part rate form, which is currently in effect, it was approved, and it has a smaller pricing differential between priority off-peak and off-peak, but that limit was put in place because of our expected inability to bill customers outside of our regular

```
1
     billing system.
 2
                COMMISSIONER KONDO: But doesn't that inability
 3
     exists today still?
                            Yes, it does.
 4
                MR. YOUNG:
 5
                COMMISSIONER KONDO: So the cap would still -- I
 6
     mean, there's -- well, just strike that.
 7
                Anyway, thank you.
 8
                MR. YOUNG: Yes, the cap --
 9
                CHAIRMAN CALIBOSO: I think Commissioner Cole has a
10
     question.
11
                COMMISSIONER COLE: I just wanted to check with the
12
     Consumer Advocate and get their views on this type of thing.
13
     I know time-of-use rates have been in place in other parts of
14
     the country and whether there's a value to doing it this way
15
     or it's an optional thing and the participation might be next
16
     to nothing or very small.
17
                MR. BROSCH: Sure, thank you.
18
                I've actually had a dialogue similar to this with
19
     Mr. Young through several rate cases now trying to understand
20
     why the time-of-use rates are structured the way they are and
21
     what has been done to study alternative forms of the rate.
22
     The constraint that I understand exist is that the technology
23
     is not there yet to accommodate either a heavily promoted rate
24
     with systematically testing or a non-optional rate form.
25
                So I have to say, from the Consumer Advocate's
```

perspective, we continue to look at the time-of-use rate proposals as a continuing pilot; one, that at the appropriate time, could be expanded and more systematically analyzed hopefully with a CIS in place and perhaps AMI in place such that the administrative burden of doing that is easily overcome by the perceived benefits of doing that.

There has been, across the country, a clammer toward more intelligent networks and advanced metering infrastructure; and, usually, as part of plans to deploy that technology, plans are made to more systematically study the customer applications, the rate applications, that might be enabled by that technology, including not only load shaping but efficiency promoting kinds of programs.

And, for instance, the Commonwealth of Edison in Chicago just received commissioner approval for an array of 24 alternative rate forms as part of their AMI pilot, where they're going to for about 140,000 customers, select by sample groups of customers and assign them a form of rate and a form of technology and then review after educating customers on how to take advantage of their assigned technology and pricing, a review after the fact what responses can be observed with the idea that then you can do some tailoring of the rate to achieve the desired goals.

COMMISSIONER COLE: I guess with the current eco design, do you think they're going to get many more takers?

And, I guess, as a follow-up to that, if we were to sweeten the incentive side of it and soften the penalty side for use in off-peak, I was just thinking with the decoupling proposal before us with the RBA and the true-up make the utility poll if, you know, they were losing money in that regard?

MR. BROSCH: There's several questions there. Let me take them one at a time.

If they were RBA accounting and the TOU rate design was changed to be a stronger incentive; and, by doing so, likely to produce lower revenues than the Company would receive under this proposal, the RBA accounting would make the Company hold for those revenue losses because the actual build revenues when compared to the target revenues would spread and later recovered.

As to the policy issues of whether you want to do that and how you might implement that, first, I would caution you that one of the concerns the Consumer Advocate had after visiting with the HECO folks about what it takes to bill each of these TOU customers manually, is that I would not want to encourage that to be done before CIS is capable of automating that process for fear that the cost would rapidly swamp to the benefits you're after.

COMMISSIONER COLE: I would agree I wouldn't do anything with the cap unless the CIS cap was in place but

1	thank you.
2	MR. HEMPLING: May I follow-up?
3	CHAIRMAN CALIBOSO: Go ahead, Mr. Hempling. Go
4	ahead.
5	MR. HEMPLING: Concerning Commission Kondo's
6	comment on the attractiveness of penalty versus carrot,
7	Mr. Brosch, as I understand it, someone who opts in to the
8	TOU-R proposal subjects himself to a very high rate in peak
9	hours, but if he modifies his behavior to a certain extent, he
10	comes out ahead. Correct?
11	MR. BROSCH: That's my understanding. I
12	understand, from the analysis Mr. Young was describing, the
13	average customer would need to move 55-kilowatt hours per
14	month from peak to non-peak periods. I think that was the
15	thrust of his testimony.
16	MR. HEMPLING: That's what he says at response to
17	PUC IR 151, correct, Mr. Young?
18	MR. YOUNG: That's correct. And that's for a
19	customer that has that particular usage and that particular
20	mix of on-peak and off-peak kilowatt hours before any
21	behavioral modification.
22	MR. HEMPLING: Specifically, so the record is
23	clear, it's a residential customer who uses 654 kWhs that has
24	distributed 26.6 percent on-peak and 73.4 percent off-peak
25	based on schedule TOU-R hours would have to move 55 kWh from

1 on-peak to off-peak in order to break even as compared to 2 billing the Schedule R rates, correct, Mr. Young? 3 MR. YOUNG: That's correct. And that's based on 4 the TOU-R rates and the Schedule R rates that are proposed in 5 direct testimony. MR. HEMPLING: Okay. I just want to understand 6 7 this penalty concept for a minute, Mr. Brosch. 8 It's not unusual for a customer of a product to opt 9 for a pricing regime where under certain circumstances they 10 could end up paying more but if they behave in a particular 11 way they could end up paying less. An example would be 12 somebody choosing a high deductible for an auto insurance or a 13 health insurance program. Correct? 14 MR. BROSCH: That's right. When you provide 15 choices for customers you enable them to make a determination 1.6 as to whether they might be better off under one approach than 17 another. 18 MR. HEMPLING: So somebody who opts into the TOU-R 19 program is not opting into a penalty, they're opting into an 20 opportunity to save money or lose money depending on whether 21 they behave in a particular manner, correct, Mr. Brosch? 22 MR. BROSCH: That's right. And using the estimates 23 Mr. Young described, there would be a penalty to that customer 24 absent some reaction and shifting of load towards the off-peak

25

period.

MR. HEMPLING: Now, Mr. Young, I gather this calculation you did concerning the customer with 654 kWhs distributed 26-6 percent on-peak and 73.4 percent off-peak, I'm sure not even you knows what your personal figures are for these three features. Right?

1.2

1.3

1.5

MR. YOUNG: No, I'm not aware of my on-peak and off-peak usage.

MR. HEMPLING: So getting back to Commissioner
Kondo's point, if I'm understanding this right, one of the
challenges here -- well, first of all, this is a -- for every
customer, regardless of how they distribute currently between
on-peak and off-peak, there are some breakeven point for them?

MR. YOUNG: That's correct.

MR. HEMPLING: So one of the challenges that anybody would have, even with all of the advertising that was necessary to get this into the consciousness of every person like posters on the wall at their offices, which they couldn't escape, announcing a program, somehow they would still have to learn this information, the four figures: Their usage, their on-peak percentage, their off-peak percentage, which would be the 100 percent less, the on-peak; and, then somebody would have to calculate for them the amount of movement, they would have to know all of that first to know whether they were going to be better off under the program, in theory, and then they would have to figure out how they would move those kWhs about

1	thinking about their usage and the equipment that it comes
2	from, they would have to do all of that to know whether it
3	made sense to make the move, is that correct, if they were
4	assuming to act rationally?
5	MR. YOUNG: That is correct in order for them to
6	make that assessment before choosing to go on the program,
7	yes.
8	MR. HEMPLING: I guess now nobody in the room is
9	surprised why there's only seven customers doing TOU-R.
10	That complexity of the decision-making has to have
11	some implications for the number of customers who are taking
12	this. Correct?
13	MR. YOUNG: I would certainly, that places
14	additional challenges on potential customers.
15	MR. HEMPLING: Does the Company are you aware of
16	any conversation within the Company about how that particular
17	type of education would take place, not merely the education
18	about the existence of the program, but the education about
19	learning how one's usage currently exists and would have to
20	change in order to make one better off?
21	Are you aware of any thoughts in the Company about
22	how to do that type of education?
23	MR. YOUNG: We haven't had that discussion within
24	the Company for our customers, and this is not this is not
25	limited to just our time-of-use. This is not limited just to

our time-of-use rate option but for other customers on optional rates, whether it be our time-of-use, TOU-C or even our Rider M or our Rider T, customers would make assessments or representations of what they think they can do to change their behavior; but, very often, there's a disconnect between what they understand and what the reality is; so, in fact, what happens is the bill or the monthly bill results, the actual performance becomes the key to whether a customer says I've gotten what I wanted to achieve, or I still need to do more to achieve what I want to achieve, or this is not something I can do. I need to opt back out. (Whereupon, Mr. Hempling brief confers with the Commission.) CHAIRMAN CALIBOSO: Just one follow up to Mr. Hempling's request for information that you need to make decision. Would that be possible and how much would that cost? MR. YOUNG: Right now, the meter -- the normal meter that provides Schedule R service does not have -- does not collect time-of-use data for customers; so, in order to provide that information to all customers, it would be very expensive. We'd have to have different meters. We would have to have a way to acquire that data from the meter and organize it and communicate it to customers.

1

2

3

4

5

6

7

8

9

10

11

12

13

1.4

15

16

17

18

19

20

21

22

23

24

25

1	CHAIRMAN CALIBOSO: So when somebody signs up for
2	this, you have to switch over the meters?
3	MR. YAMAMOTO: Yes.
4	CHAIRMAN CALIBOSO: So you're saying that before
5	that switch overs then they don't have that data?
6	MR. YOUNG: They don't have that data.
7	CHAIRMAN CALIBOSO: In other words, it's
8	impractical to calculate that or get that data manually, is
9	that what you're saying?
10	MR. YOUNG: We're unable to get that data without a
11	different meter at the customer's location, service location.
12	CHAIRMAN CALIBOSO: But once the meter is in, that
13	data is available?
14	MR. YOUNG: Yes.
15	CHAIRMAN CALIBOSO: Thank you.
16	MR. HEMPLING: Does the technology exist, it simply
17	doesn't exist at the Company or doesn't exist anywhere for the
18	type of meter that you and the Chairman were discussing?
19	MR. YOUNG: The technology, it exists. It's just
20	that currently that's not the default meter that's placed at
21	residences.
22	MR. HEMPLING: So it's within costs aside, costs
23	of installation and costs of buying the meter aside, it's
24	within the Company's grasp in the not remote future to create
25	a situation where you can inform each customer that if they

```
2
     a particular rate design, that potentiality exists in
3
     technology today?
                MR. YOUNG: My understanding is that that
 4
     potentially exists, although, I'm -- the particular details of
 5
 6
     the technology and the timing or availability to HECO have to
 7
     be answered by someone yes.
 8
                MR. HEMPLING: Two questions, Mr. Brosch, before we
 9
     take a break, and thanks for you stamina.
10
                The Commonwealth Edison program that you
11
     described --
12
                MR. BROSCH: Yes.
13
                MR. HEMPLING: -- you referred to Commonwealth
14
     Edison "selecting" groups.
1.5
                Do you remember that?
                MR. BROSCH: Yes.
1.6
17
                MR. HEMPLING: Optional or not optional for the
     selected customers?
18
19
                MR. BROSCH: As I understand the approach, there is
20
     an AMI pilot in one of Com Ed's operating divisions that has
21
     been authorized, where most of these customers would reside,
22
     called the Maywood operating division. Then there is a
23
     smaller pilot location in downtown Chicago to get the highrise
24
     operating environment and information about that.
25
                Com Ed would then select customers to participate
```

were to shift X kWhs to Y period, they could save money under

1

1	in the customer application pilot and send a survey to that
2	customer offering a 15-dollar-bill credit for customers who
3	fill out and return the survey indicating their willingness to
4	participate and providing some information about the end uses
5	of energy in their home; and, then with those return surveys,
6	the customer could elect to opt out affirmatively with their
7	return.
8	So nothing is mandated and customers are incented
9	to reply. And then the customer, as I understand it, is
10	assigned a rate type and a technology type, and the rate types
11	include the default base rate, declining block rates of
12	critical peak rates, the whole array of alternatives with four
13	variations of each rate, summer, non-summer, and whether
14	they're electric heating or non-heating.
15	MR. HEMPLING: I got what I asked.
16	It's voluntarily but it's opted out?
17	MR. BROSCH: Yes.
18	MR. HEMPLING: I'd like to turn to after the
19	break, a few questions on TOU-C and TOU-G that I think we'll
20	be going over, Mr. Young.
21	MR. YOUNG: Thank you.
22	CHAIRMAN CALIBOSO: Let's take our 15-minute break
23	and come back about five to eleven.
24	We are in recess.
25	(Whereupon, at 10:41 a.m., a recess was taken, and

1 the proceedings resumed at 10:57 a.m., this same day.) 2 CHAIRMAN CALIBOSO: Good morning again. 3 Let's reconvene this hearing. Mr. Hempling, you can continue. 4 5 MR. HEMPLING: Mr. Brosch, we're focusing on the 6 high price that the TOU-R customer pays during on-peak 7 periods. 8 Has the Consumer Advocate studied whether there's a 9 possibility of Company overrecovery of its settlement revenue requirement as a result of that high price? 10 11 MR. BROSCH: No. The Consumer Advocate was aware 12 that there had been very little customer acceptance or 13 utilization of the time-of-use rates and asked of HECO whether 14 there was any effort to project revenue impacts from customer 15 adoption; and, upon learning that there was not, we did not 16 embark on any independent analysis of those potentially 17 impacts. MR. HEMPLING: Now Mr. Young, sorry to go backwards 18 19 but, perhaps, this question applies to all the rate designs 20 where there was an on-peak and off-peak differential. I'm understanding these rate differentials to be 21 22 unconnected to the costs of service that exists during those 23 on-peak and off-peak periods but, instead, the rate 24 differential is designed to create movement to induce movement 25 for the customer from one theory to another; is that correct?

1	MR. YOUNG: That is correct.
2	MR. HEMPLING: Okay. Let me ask a few questions
3	about the TOU-C and TOU-G rates.
4	I'm going to try not to get mixed up because I know
5	there were merges and changes in the various customers.
6	The TOU-G rate, that's a proposed rate; is that
7	correct?
8	MR. YOUNG: That is correct, both the TOU-G and the
9	TOU-J rates, in this case, are proposed rates. What we
10	attempted to do is break out the existing TOU-C rate, which
11	has a non-demanded and a demand option into simply two
12	separate rates two separate rate options, I should say.
13	MR. HEMPLING: And the TOU-G rate has a priority
14	peak, a mid-peak, and an off-peak set of periods available?
15	MR. YOUNG: Yes. Those are the time periods
16	available or proposed for TOU-G and TOU-J are the same time
17	periods that exist in the existing TOU-C.
18	MR. HEMPLING: And the TOU-C existing has had those
19	three periods since?
20	MR. YOUNG: The three the TOU-C rate became
21	effective in June 2008, upon approval in the HECO test year
22	2005 rate case; but, let me add that the definitions of the
23	time periods of the priority peak period well, let me
24	let me go back the other way.
25	The definitions of on-peak period 7 a.m. to 9 p.m.

and off-peak period from 9 p.m. to the following to 7 a.m. the following day, have existed in existing rate options, and I refer to Rider T and Schedule U, for many years.

In addition, the definition of the priority peak period from 5 p.m. to 9 p.m. weekdays has existed in our Rider M rate option for many years. What we've done in our rate proposal is adopt those time periods, and so we've defined a mid-peak period as simply the on-peak period exclusive of the priority peak period; so, the mid-peak period is 7 a.m. to 5 p.m. on weekdays and 7 a.m. to 9 p.m. on Saturdays and Sundays, so the time-of-use periods that we have used in the TOU-C have actually been in other rate options available to Schedule J and Schedule P commercial customers for many years.

MR. HEMPLING: Could you do a new analysis of what the hours should be for these three periods when you designed the new TOU-G and TOU-J?

MR. YOUNG: No, we did not. The effort in proposing these rate options in the test year 2005 was an attempt to extend a time-of-use rate opportunity to all customers, the Rider T and the Schedule U were available to existing the band customers, customers who had loads greater than 25 kW, the proposed and ultimately approved Schedule TOU-R and Schedule TOU-C in the 2005 rate case, extended the time-of-use rate opportunity to residential customers and to

1 small commercial customers, those with loads less than 25 kW. 2 MR. HEMPLING: So if I ask you how you chose the 3 hours for the three periods, priority peak, mid-peak, and 4 off-peak, the answer we chose what we had before we just combined them? 5 MR. YOUNG: Yes. 7 MR. HEMPLING: So if the Commission were looking at 8 it to understand what analysis went into the decisions about 9 these periods, would the answer be no analysis or some 10 analysis or no relevant analysis, because whatever analysis 11 was conducted was conducted years ago, what would the answer 12 be? 13 MR. YOUNG: The answer would be there was no new We adopted the existing periods that were available 14 1.5 to larger commercial customers and extended those and made 16 them available to smaller customers. 17 MR. HEMPLING: So do we have any idea whether these 18 are the right periods of time for this particular set of 19 customers in terms of their usage patterns? 20 Do we have any idea in terms of the current usage 21 patterns? 22 MR. YOUNG: We believe that that is still 23 representative of current usage patterns, and we can see that 24 in the load profile that, I believe, we provided in response 25 to either PUC IR 104 or CIR 104.

1	MR. HEMPLING: So you did look at a load profile.
2	You just looked at as post hoc justification rather than as
3	part of the design process for the new rate schedules?
4	MR. YOUNG: We are aware that our load profile has
5	generally remained the same over a number of years where we
6	have an evening peak that is captured by the five-to-nine
7	priority peak period; and, in the low period, in the late
8	night and early morning, that is captured by the existing
9	off-peak period from 9 p.m. to 7 a.m. the following day.
10	MR. HEMPLING: And the weekday versus weekend
11	extension is there was no reason to change that either based
12	on your understanding of load patterns?
13	MR. YOUNG: That's right. There is a if you
14	were to additionally provide, in the same form as a response
15	to IR 104 of a weekday pattern versus a weekend pattern, you
16	would see the same shape on the weekend, but it would be at a
17	lower level; and, that's primarily due TO different levels of
18	business; particularly, of government operations being closed
19	on the weekends.
20	MR. HEMPLING: Now you responded in an PUC IR 147
21	that concerned Schedule TOU-C.
22	There was only one customer, a customer who began
23	service in 2008?
24	MR. YOUNG: That is correct.
25	MR. HEMPLING: Any thoughts on why there was only

1	one subscriber to TOU-C?
2	MR. YOUNG: We don't have any data or market
3	intelligence on why that is.
4	MR. HEMPLING: Do you know why that one customer
5	shows it?
6	MR. YOUNG: The customer that had been selected
7	actually has without identifying the customer has a
8	number of meters on that property, and the customer was making
9	a concerted effort to examine rate options for all of their
10	services on their property, and they found that the pattern of
11	service at that particular meter could be they could
12	successfully achieve a savings if they were on the TOU-C
13	non-demand rate option.
14	MR. HEMPLING: So I gather from your last question
15	that this is not a customer with an unusual load pattern, it's
16	a customer with an unusual level of alertness with respect to
17	energy costs and the opportunity to save?
18	MR. YOUNG: It's probably closer to the latter,
19	yes, than the former.
20	MR. HEMPLING: You said that TOU-C customer had a
21	number of meters on the property.
22	Are they modern meters or the same meters that
23	other similar commercial customers have?
24	MR. YOUNG: They are not there are meters that
25	do not gollogt timo-of-uso data

1 MR. HEMPLING: So this customer is an example of 2 what can happen if there's alertness on the part of the 3 customer and attention to their electricity costs? 4 MR. YOUNG: In this particular case, yes. 5 MR. HEMPLING: Does the Company have any prediction 6 as to how many customers will take service under TOU-G or 7 TOU-J? Any prediction? 8 MR. YOUNG: We don't make a -- we do not make a 9 prediction and we haven't made an estimate of participation 10 for the test year as we indicated in our response to 11 PUC IR 150. 12 MR. HEMPLING: So the proposed revenue requirement 13 for the commercial classes assumes no change in customer 14 behavior relative to the era when TOU-C and TOU-J did not 15 exist? We would characterize it as there is 16 MR. YOUNG: 17 no -- at least for the test year, we do not have an estimate of revenue savings from participation in those rates. 18 And, if I could go back to your last question, to 19 Mr. Brosch, regarding the risk of overrecovery of revenue 20 requirements, although we are, from a data perspective, unable 21 to help customers in advance of their participation on these 22 23 optional rates as to whether they will save or not, we are 24 able to communicate to customers who do participate in these 25 rates.

On a monthly basis we are able to indicate to them whether they're saving or not; so, we're providing information right away so they can make an assessment as to whether they need to stay on or opt out. From that perspective, I would suggest that the risk of overrecovery of revenue requirements is nil or small successful participation by such optical customers would, of course, would result in reduced revenues. MR. HEMPLING: Concerning the customer groups who are eligible for TOU-G and TOU-J, does the Company have the capacity for the ability to analyze usage and send such customers a letter saying, given your characteristics, if you do X and Y in terms of behavioral change, then you can save money under one of our new TOU rates? Does the Company have that capability? MR. YOUNG: The Company has the capability to do that analysis and we do, on occasion, do that analysis upon request by the customer, but let me qualify that. presumes that time-of-use data, metered or usage data, is available for that customer; and, generally, if you have a standard meter, that data isn't available. Is not available? MR. HEMPLING:

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. YOUNG: Is not available.

MR. HEMPLING: Okay. Help me understand that.

MR. YOUNG: So how does that come about?

Generally, for our larger customers, we have an account manager group that basically services, I want to say, our largest customers our Schedule P customers, and let me describe a process where this assessment may come about.

If the customer is interested, if that kind of customer is interested in rate options, then that would include time-of-use rate options, but it could also include our curtailment rider, Rider M; and, if we did not have time-of-use information on that customer, on occasion, if the customer request, and I don't know what determines the successful customer request; but, upon customer request, we have had in the past a placement of a recorder, a data recorder at the customer's site, and that recorder will collect time-of-use data information for that customer.

We will take that read -- the pricing division will take that time-of-use information and make billing calculations on the different rate options to assess where a customer's bill falls on their regular rate and where it might fall on a particular rate option so that the account manager can have a discussion with the customer as to whether they could be successful or not taking up a rate option for what they might have to do to be successful on that rate option.

MR. HEMPLING: Where is the account manager group in terms of the Company's organization, under what major division?

1	MR. YOUNG: The Account Manager Group used to be in
2	the Energy Services department until March. I'm not sure what
3	group it is in now. It's in a group where it's in a
4	different group.
5	MR. HEMPLING: Maybe Mr. Kikuta can answer this
6	question.
7	Is that group ultimately under Mr. Alm's domain or
8	under some other top executive?
9	MR. YOUNG: I can answer that. That group does
10	fall under Mr. Alm.
11	MR. HEMPLING: Could Mr. Alm be prepared tomorrow
12	to discuss some issues relating the account managers, if the
13	Chairman allows that line of questions?
14	MR. KIKUTA: Certainly.
15	MR. HEMPLING: Now do you know anything about the
16	daily the job responsibilities of the Account Manager
17	Group?
18	Is it simply to make customers happy or is it to
19	maximize revenue for the Company from these customers?
20	MR. YOUNG: I'm not aware of the specific
21	individual responsibilities of the Account Manager Group.
22	MR. HEMPLING: I mean, if an account manager comes
23	in and says I found a way to reduce the Company's revenue from
24	this customer by 30 percent, is that likely to affect this
25	person's promotion chances?

Do we know?

MR. YOUNG: I don't know, personally. We have -- let me go further.

As a result of, in the past, and that would be years back. If the account manager found a rate option that a customer could successfully undertake, that would save the customer on their electric bill based on behavioral changes, that those customers would be signed up on whatever rate options were appropriate for them, so we have -- we did -- we have had in the past instances where customers have taken on rate options that have saved them money based on Company analysis.

MR. HEMPLING: Right. But we don't know whether the account manager's job responsibilities explicitly include -- find the way to minimize the revenue that the Company gets from this customer group, we don't know if that's in the account manager's job responsibilities, do we, at least sitting here today?

MR. YOUNG: I don't know if that's explicitly in their job responsibilities. Certainly, when we have worked with account managers in the past, that has been a feature of their relationship with their customers.

MR. HEMPLING: All right. Well, maybe Mr. Alm can give us more explicit answers tomorrow.

So the process that you described, Mr. Young, by

1 which an account manager -- excuse me -- by which the Company 2 could go about informing each customer eligible for TOU-G or 3 TOU-J as to their options that sounded fairly involved. involves special meters, it involves calculations, it involves a number of discussions. 5 Did I understand you correctly? 6 7 MR. YOUNG: Yes, you did. And my example would be account managers, I attempted to illustrate that the fact, 8 9 while we do undertake that activity, it's limited to -- our 10 proactive approach to that is limited to larger -- the largest 11 customers of our system. 12 MR. HEMPLING: Largest meaning over what level of 13 demand and consumption, roughly? MR. YOUNG: Largest in terms of customers who are 14 15 Schedule PS or PP or PT, so it would be customers who are above 300 kW. 1.6 17 MR. HEMPLING: So the proposed TOU-G and TOU-J do 18 not have limits on the number of customers eligible. Correct? 19 MR. YOUNG: That's correct. 20 MR. HEMPLING: But there is some limit beyond which the Company would have difficulty processing and servicing 21 22 these customers, correct, under its present infrastructure? 23 MR. YOUNG: Certainly, there would be. MR. HEMPLING: I've somehow found my way back to 24 25 Schedule R and Schedule TOU-R.

1	Mr. Young, do you have available your response to
2	PUC IR 140 and 143?
3	Are there any questions about TOU-G and TOU-J?
4	CHAIRMAN CALIBOSO: No.
5	MR. YOUNG: Those were PUC IRs 140 and 143.
6	MR. HEMPLING: Yes.
7	MR. YOUNG: I have those.
8	MR. HEMPLING: You're discussing here the reasons
9	for the specific blocks, that is the block of zero to 350 kWh
10	from 350 to 1200 kWh and above 1,200 kWh, correct, that's what
11	you're discussing here in 143?
12	MR. YOUNG: Yes, that's correct.
13	MR. HEMPLING: Yeah. So some questions in this
14	area.
15	It says that the, "The first tier meaning the
16	tier from zero to 3350 kWh "was set to provide the lowest
17	energy rate per a base kWh usage level. The first tier was
18	set to include about one-quarter of all residential customer
19	bills and about one-half of all residential kWh."
20	Do you see that?
21	MR. YOUNG: Yes.
22	MR. HEMPLING: And then the second tier was set to
23	capture I guess the second tier was set so that the sum of
24	the first tier and the second tier would capture 90 percent of
25	all residential kWh billed and either the first or second tier

1 rate. Correct? 2 MR. YOUNG: That's correct. And then the third tier was set to 3 MR. HEMPLING: capture just the remaining 10 percent. Correct? 4 5 MR. YOUNG: That's correct. 6 MR. HEMPLING: So I'm not meaning to be 7 argumentative, what was the reason for these numbers of 8 capturing one-quarter versus 90 percent? Anything? 9 MR. YOUNG: As we described in the response, this 10 form or structure for inclining block rates was first proposed 11 or advanced in the HELCO 2006 test year rate case; and, we 12 felt it was appropriate to advance also in the HECO 2007 and 13 MECO 2007 rate cases, that the -- let me speak about the 14 highest tier. 15 It was -- we -- 10 percent was thought to be an 16 appropriate amount to have, or in terms of the exposure for 17 the highest usage customers were thought to be an appropriate 18 amount to have fallen to a third tier; and, we did focus in, 19 in the HELCO case on trying to capture about 25 percent of the residential bills, and it happened to be nice that about half 20 of the kWh are associated with that tier cutoff level. 21 22 MR. HEMPLING: Right. I don't want us to go around in circles. You used the adjective "appropriate." 23 assuming you didn't choose it because it was going to be 24

25

inappropriate.

```
1
                I'm asking what was the reason and what was special
 2
     about 10 percent other than the fact that it has a zero in the
     number?
 3
 4
                Why not 30 percent?
 5
                Why not a larger number to hit with the highest
     tier rate?
 6
 7
                MR. YOUNG: Because this was a new proposed rate
 8
     form, we felt it was -- we didn't want to expose a lot of kWh
     to that highest rate --
 9
10
                              Why not?
                MR. HEMPLING:
11
                MR. YOUNG: -- and 10 percent was just felt to be
12
     an appropriate number.
                MR. HEMPLING: Well, the purpose of the higher rate
13
14
     is to discourage large quantities of consumption, right,
     that's what you wanted to do?
15
16
                MR. YOUNG: Well, if we go back to the response to
17
     IR 140, when we proposed the rate in the HELCO case, 2006
18
     case, and the same logic would apply in the HECO 2007 case,
19
     MECO 2007 case, as well as this present case, part of the
20
     reasons for having the design were to manage the bill impact
21
     of the proposed revenue requirement increase on the smallest
     uses of the system, as well as assigning more of the costs to
22
23
     those who used more kWh, as well as creating a price
24
     increase --
                                Well, I'm having trouble --
25
                MR. HEMPLING:
```

1 MR. YOUNG: -- and --2 MR. HEMPLING: Sorry. 3 MR. YOUNG: -- in order to do that, setting the 4 price for the lowest tier quantity becomes very important and 5 then it's setting the other -- setting the -- with the 6 assumption of the kWh that falls in the highest tier, to a 7 certain extent that price needed to be set just to meet revenue requirement target for that rate plan. 8 9 MR. HEMPLING: Let me see if I can follow your reasoning and maybe it's not much more to it than this, but 10 11 that's what I want to get to the bottom of. 12 This is not cost base, right, because the 1,200, 13 kWh cost the same and it's the same time of day, the same 14 generation, the 1,200 kWh cost the same for the Company to 1.5 produce as the 350 of kWh. Correct? 16 MR. YOUNG: That's correct. 17 MR. HEMPLING: So this setting up with the various 18 tiers, as you've just pointed out, have more to do with 19 distributing cost among usage groups. Correct? 20 MR. YOUNG: It has to do -- yes, with managing the bill impact to the smallest usage groups and other the usage 21 22 groups. 23 MR. HEMPLING: That's what I want to understand, and tell me if I'm misinterpreting you, but it sounds like you 24 started with a goal of having the small users -- I think you 25

```
1
     used the word "protected" from large rates.
 2
                Is that how you started the analysis by saying
 3
     there's a group of small users and we want them to have a
 4
     particular experience; and, then that became a constraint that
 5
     led you to choose the levels for the next two tiers?
 6
                Is that the sequence of analysis, Mr. Young; or,
     was it more arbitrary than that?
 7
 8
                MR. YOUNG: Given the revenue requirement that we
 9
     were trying to price out with prices set for the Schedule R,
10
     we did -- there's an average revenue requirement increase
11
     assigned to a schedule -- to the Schedule R in our rate case
12
     proposals.
                MR. HEMPLING: An average rate of increase assigned
13
     to Schedule R --
14
15
                MR. YOUNG: Right.
16
                MR. HEMPLING: -- for example, in this case, it's
17
     approximately 5.2 percent. Correct?
18
                MR. YOUNG:
                            In direct testimony, yes.
19
                MR. HEMPLING: All right. So that's what you start
20
     with, with --
21
                MR. YOUNG:
                            Right.
22
                MR. HEMPLING: -- that decision.
                                                   Right?
23
                MR. YOUNG: And given that allocation or proposed
24
     allocation to Schedule R, when we did this initially it was a
     much higher percentage increase, of course, in the HELCO 2006
25
```

```
1
     rate case.
                 I believe it was 9 or 10 percent.
 2
                MR. HEMPLING:
                                I'm sorry?
                MR. YOUNG: When we first proposed this inclining
 3
     block rate form, which was in the HELCO test year 2006 rate
 4
 5
     case --
                MR. HEMPLING: And by "form," you're referring --
 6
 7
                MR. YOUNG: I'm --
 8
                MR. HEMPLING: -- to the one-quarter at the bottom
 9
     end and the 90 percent at the top end?
10
                MR. YOUNG: Yes --
11
                MR. HEMPLING: Okay.
12
                MR. YOUNG: -- the inclining block rate form.
13
                When it was first proposed in the HELCO rate case,
     I believe our proposed average increase for Schedule R in that
14
1.5
     case was closer to the order of 9 or 10 percent.
16
                The concept then was that that's a significant
     increase to assign to Schedule R customers and we -- our goal
1.7
18
     was to make that somehow distribute the increase of that.
19
     increase would fall less heavily on those who used less
20
     electricity or, at least, really for all customers who used
21
     that level of electricity have that impact be smaller and then
22
     go and tier that up and still recover that average revenue
     increase but have it staggered in a different form.
23
                MR. HEMPLING: So it sounds like it was social
24
25
     policy, as opposed to a pricing policy, that led to the
```

1 selection of these cutoff boundaries among the three tiers. 2 It's my words, not yours. It didn't relate to energy 3 conservation. It related to the impact to disposable incomes? 4 MR. YOUNG: It related to impact on the smallest 5 6 users of the CIS system. It does -- because it creates 7 different prices for different usage levels, it does, as a consequence, send some pricing signal for energy efficiency. 8 9 MR. HEMPLING: Right. But that pricing signal is an incident of the decision to protect or to protect the small 10 11 usage customers. It wasn't the purpose of the design. 12 an outcome of the design; is that correct? 13 MR. YOUNG: They kind of come together. 14 MR. HEMPLING: It wasn't the purpose of the design 15 to induce energy conservation. It was an outcome of the 16 design; is that correct? 17 MR. YOUNG: I would say that as part of the design 18 but not the primary part. 19 MR. HEMPLING: Okay. Mr. Brosch -- well, now back 20 to you, Mr. Young. 21 So if the upper tier was captured at 30 percent 22 rather than 10 percent of the usage, there would be even a 23 more favorable treatment of the lowest 25 percent users, 24 correct -- or the lowest 25 percent of the residential 25 customer usage. Correct?

1	MR. YOUNG: If you were to if the inclining
2	if the design of the usage levels of the inclining blocks were
3	different and are in different proportions, there are a number
4	of pricing combinations that will become available that you
5	could choose to design different impacts to different groups.
6	MR. HEMPLING: Right. But what I'm saying is if
7	it's just the arithmetic, if the 90 percent became excuse
8	me, if the 10 percent that were under the third tier became
9	30 percent, that would be more people paying the highest rate
10	and if you kept the other tiers, the first quarter would then
11	pay a lower rate, the same revenue
12	MR. YOUNG: For the save revenue requirement, yes.
13	MR. HEMPLING: All right. Mr. Brosch, I think,
14	this is new to the Commissioners, this thinking. I could be
15	wrong on that.
16	But are you aware of how companies elsewhere go
17	about selecting the number of tiers in an inclining box
18	context and the reasoning that they used to get there?
19	And I'm not meaning to be critical through these
20	questions of the companies, I'm just curious as to how people
21	go about doing it.
22	Any thoughts?
23	Is this the way it's usually done?
24	MR. BROSCH: Well, let me say first that there are
25	own a few jurisdictions I'm aware of that are practicing this

1 kind of rate structure for Schedule R. 2 "This kind" meaning inclining MR. HEMPLING: blocks. 3 4 MR. BROSCH: In an inclining block structure, yeah. 5 I mean, it's growing in popularity as an impetus toward 6 promoting conservation, but if you look, for instance, to 7 California, I think there's a history of this structure of 8 rates that has been colored by some legislative decisions that 9 have been made over the years, some social policy in 10 intentionally constraining price pressure on low volume users 11 and even medium volume users during the big run up in energy 12 costs for the market problems in 2001, 2002 timeframe. 13 There are a lot of social policy considerations 14 that play into this and a fair amount of judgment. Here, in 15 Hawaii, the HELCO case that Mr. Young spoke of, was, I think, 16 the first encounter with this rate structure. MR. HEMPLING: Yes, excuse me. I just wonder if 17 18 you heard my question. 19 I'm asking whether you're familiar with other modes 20 of reasoning, besides the ones articulated by Mr. Young, for 21 how a company would go about establishing the differences among the points in usage in which we create the boundaries. 22 Are you familiar with other modes of reasoning? 23 24 MR. BROSCH: I would say generally the modes of reasoning would have to do with social policy and managing 25

1 customer impacts. 2 MR. HEMPLING: Have you ever heard of any other 3 type of reasoning used besides that one? MR. BROSCH: Ever is a long time. Nothing comes to 4 5 I would, I guess, go back to a question you asked mind. Mr. Young about cost base and say that generally this rate 6 7 form is not cost base. We have a customer charge that 8 recovers a fraction of total fixed cost, and those fixed cost remain and are not avoidable with a low volume customer; so, 9 10 cost base rates would be either flat or more likely a 11 declining block. 12 MR. HEMPLING: Mr. Brosch, what would be the --

MR. HEMPLING: Mr. Brosch, what would be the -what would be the pros and cons of having a -- well, yeah,
what would be the pros and cons of having a larger percentage
of the residential population in the highest tier?

Any thoughts?

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. BROSCH: Well, if I think first of the desire to reward conservation behavior, I would think that a more steeply inclining lock-rate structure or more exposure to high rates at higher levels of usage would amplify that incentive and the paybacks toward a customer's investment in conservation.

The con that comes with that is the intended amplification of variability and revenues to the utility if customers successfully do that; in other words; revenue

1 stability tends to suffer when more revenue is at risk in the higher blocks of the rate; and, of course --2 3 MR. HEMPLING: And, therefore -- I'm sorry, go 4 ahead. 5 MR. BROSCH: -- with decoupling that that effect is 6 captured and the Company is made whole. 7 MR. HEMPLING: The effect disappears? 8 MR. BROSCH: It disappears in that the Company is 9 made whole and other customers make up for that revenue 10 shortfall on a per-kilowatt-hour basis. 11 Beyond that, I think you would have to be attentive 12 to initial customer impacts. I think you would have the risk 13 of potentially shocking customers that have high usage with far above average revenue increases, and there would be some 14 risks that you're doing that in a way that doesn't necessarily 15 punish them for lack of conservation; but, instead, reasons 16 17 why their energy usage is high that they may not be able to 18 control. 19 MR. HEMPLING: Can I stop you there for a minute? 20 So may I? So what you're referring to is that for a number of 21 2.2 customers, as Commissioner Kondo pointed out, some aspects of 23 their consumption are discretionary but some aspects are not 24 unless they're going to move their houses and change their

25

whole lifestyle?

MR. BROSCH: That's correct. When you talk about a customer's responsiveness to price signals, the inherent assumption is they have some choices that are not too terribly painful to make and some customers have more choices than others in that regard.

1.4

MR. HEMPLING: So in designing the placement of the boundaries between usage tiers, does it make sense to study the extent of discretion that customers have?

MR. BROSCH: Possibly, although I'm not sure there's an efficient way to do that. What I had in mind, in looking at this rate structure, is to move gradually and see what kinds of customer responsiveness we might see through time without aggravating customer effects; or, said differently, while maintaining some gradualism across the entire spectrum of individual customer usage customer patterns.

MR. HEMPLING: But assuming the Company had a way to find typical neighborhoods, typical types of housing stock and typical arrays of equipment within the home, assuming the Company could develop a picture of customer discretion then that information would inform the Company as to the level of acceptability that a larger block would attain. Right?

MR. BROSCH: There may be some intelligence game by studying customer end-use patterns and a saturation of air conditioning and water-heating devices of different fuel

```
1
             I don't know whether at the end of that you would have
     types.
2
     sufficient information to more intelligently design tiers or
3
     not.
 4
                MR. HEMPLING: When you say you don't know, you
 5
     mean -- what you mean is you don't know, you're not meaning to
     say you don't think it's a good idea, but you're trying to be
 6
7
     polite in how you're the answering question?
8
                MR. BROSCH:
                             Well, perhaps. I think --
 9
                MR. HEMPLING:
                               What does "perhaps" mean?
                             That would be a fairly intensive study
10
                MR. BROSCH:
     and may yield results that are meaningful for customers in one
11
     group or area and not in other areas, and I have in mind there
12
13
     are variables beyond the end use choices that customers make
14
     such as vocation.
15
                MR. HEMPLING: What does vocation have to do with
16
     it?
17
                             If a given customer has more exposure
                MR. BROSCH:
     to whether in a need for air condition use in another, for
18
19
     example.
20
                MR. HEMPLING:
                                Thank you.
                I just have, Mr. Young, one question on Schedule J,
21
     and I think I'm finished with the time with the rate design
22
23
     questions.
24
                Are you familiar with Schedule J, Mr. Young?
25
                MR. YOUNG:
                             Yes.
```

```
1
                MR. HEMPLING: Wait a minute. You don't have to
2
     pull that out.
                I don't have that -- relax, I don't have that
 3
     question.
 4
 5
                MR. YOUNG: Okay.
                COMMISSIONER KONDO: Can I ask one question,
 6
 7
     Mr. Young?
                Now Mr. Brosch --
 8
                MR. YOUNG: Yes.
 9
10
                COMMISSIONER KONDO: -- had noted the difficulty
11
     for the Company, given its present infrastructure to monitor
12
     the time-of-use or the time-of-use usage, for a lack of a
13
     better term, of customers, could you explain the process that
     the Company goes through currently to manually bill these
14
     customers, so I have a better understanding of that burden.
15
                MR. YOUNG: Let me -- I think I have a description
16
17
     that I can summarize for you --
                COMMISSIONER KONDO: All right.
18
19
                MR. YOUNG: -- for a residential customer on this
20
     time-of-use rate option.
                When -- let me see if I can summarize this, and if
21
22
     there are gaps, I'll answer your further questions.
                When a residential customer elects time-of-use rate
23
24
     option, we go out and we, the Company puts, a different meter
     at the customer location and that meter has different
25
```

registers it collects, the meter is actually programmed to capture the time-of-use periods per the tariff that's in place.

The meter reader has to -- that the billing of the meter, the read date, has to go to that meter and via a handheld device collect the data from the different registers so that we know what the time-of-use data is for each customer; and, we actually upload that data into a data system -- this is not the billing system -- and we take that data out of that system and it allows us to format that data so that we can use it in a spreadsheet, and we check the readings and usage for the different periods and make sure that internally we've collected data from all the usage periods and the total.

So we do a quality control check to make sure that the sum of the usage and all the individual periods equals the total, and we do a -- it's not a manual calculation, it's a spreadsheet calculation of the bill.

So we calculate the bill per the TOU rates. That gets calculated by one person, checked by another person, that information is forwarded to the customer service people.

Now what we're trying to do is create that bill for the customers, so we have to take that billing information that's been calculated on the spreadsheet, and it is manually uploaded into the billing system, our existing access billing

system; and, we from the spreadsheet, somebody manually enters 1 2 or populates billing values, so that a customer bill is 3 generated in the form that those of you who get an electric 4 bill that you see. 5 We also include this spreadsheet calculations so 6 that the bill doesn't automatically get processed through our, 7 you know, the computer makes a bill on it automatically and 8 gets mailed out. They do have to set up that bill so that 9 it's manually pulled so that we can add this second detail 10 sheet, which will communicate information to the customer; 11 quite frankly, where they're using the electricity and whether 12 they're saving or not. That second sheet is added to the 13 billing sheet manually and then it's put in the mail to the 14 customer. 15 I'm sorry, a long explanation but that's --16 COMMISSIONER KONDO: No. Thank you. 17 MR. YOUNG: -- part of our process. 18 COMMISSIONER KONDO: Thank you very much. 19 CHAIRMAN CALIBOSO: Sorry, I've been sitting here 20 and I'm thinking what things I need to ask you. 21 Is it true that in some areas Hawaiian Electric is 22 installing more advanced typed meters for your developments? 23 I believe Mr. Fetherland can speak to that program. 24 Thank you. 25 Is he here?

1 MR. YOUNG: Yeah. 2 CHAIRMAN CALIBOSO: Have you been sworn in, sir? 3 MR. FETHERLAND: No. 4 CHAIRMAN CALIBOSO: Do you solemnly swear or affirm 5 that the testimony you're about to give will be the truth, the 6 whole truth and nothing but the truth. 7 MR. FETHERLAND: I do. 8 CHAIRMAN CALIBOSO: Thank you. 9 MR. FETHERLAND: Okay. So you're interested in 10 whether we've installed advance meters and where? 11 CHAIRMAN CALIBOSO: Yes, yes. Even though they may 12 not have signed up for time-of-use rate program. 13 MR. FETHERLAND: And the number, you know, it sort 14 of changes, but we have about 8,700 meters. There's about 15 3,000 meters out in an Ocean Point Development out in Eva 16 Beach. We got about 1,100 meters up in, sort of, like 17 Tantalus and Palolo Valley area; and, so, sort of, roughly, 18 about 4,000 to 4,200 meters that are actually capturing 19 monthly billing register reads, and we're billing, sort of, 2.0 through an automated process into our CIS. 21 CHAIRMAN CALIBOSO: And so for those types of 22 customers that have those meters at their homes, you are able 23 to get advance data for them to help them decide whether or 24 not they should opted for the time-of-use rates that are 25

proposed for?

1 MR. FETHERLAND: Yeah, there's more than enough 2 data, I think, in those cases. I think the limitation comes 3 at the back end like, sort of, Peter talked about the -handling, you know, through that spread process. 4 That's for 5 the bottleneck, but getting the data through like this AMI 6 type process is very straightforward. 7 CHAIRMAN CALIBOSO: In those cases, does someone 8 need to go to the house and use a handheld or is that through 9 the lines or is wireless layers or some other technology? 10 MR. FETHERLAND: It's going through radio frequency 11 communications, so basically wireless. 12 CHAIRMAN CALIBOSO: Okay. Thank you. 13 Maybe this goes more for Mr. Young. 14 Thinking about the design of this program in 15 general; and, again it's a voluntary program. 1.6 All right. So you have to understand, I guess, 17 that anyone who signs up for this program would only sign up for it if they're pretty sure that they wouldn't be incurring 18 usage during the peak hours would they be able to reduce their 19 2.0 usage during the peak hours and take advantage of the nonpeak 21 hours. Right? 22 MR. YOUNG: Yes, that their -- for those who sign 23 up, that we expect that's their anticipation, yes. 24 CHAIRMAN CALIBOSO: Yeah. And then you have to

pretty much anticipate that nobody is going to sign up if they

25

1 think they'll have to use a whole lot of energy during the 2 peak areas otherwise they just would wouldn't sign up. 3 Correct? Generally, that's our expectation. 4 MR. YOUNG: 5 CHAIRMAN CALIBOSO: And because it's not a mandatory program, you're not going to capture those you 6 7 cannot move and will have to, you know, by default, pay the higher rates? 8 That's correct. 9 MR. YOUNG: CHAIRMAN CALIBOSO: So I think in looking at it 10 11 from the big picture viewpoint, it seems like no matter what 12 happens, how many customers you get to sign up for this, will 13 have to be at a net loss for the Company, right, because only 14 people who are going to save money are going to sign up for 15 this? 16 MR. YOUNG: That would be our expectation, yes. CHAIRMAN CALIBOSO: And there's no countervailing 17 18 offsetting increase in revenues from those who don't sign up 19 for it, at least not our plan in this -- the way the rates are 20 structured now. Right? MR. YOUNG: Not in current rates and, of course, 21 22 we, as we indicated in our response to PUC IR 150, we did not estimate a revenue loss from successful participation in these 23 24 options of, as Mr. Brosch, has suggested a revenue balancing

account could pick up that shortfall, if one was approved.

25

1	CHAIRMAN CALIBOSO: So, generally speaking, at any
2	time a voluntary program would probably work that way, right,
3	you would have to anticipate a net loss for the Company?
4	MR. YOUNG: Right. And we've seen that in the past
5	with our older voluntary rates with our Rider M and our
6	Rider T.
7	CHAIRMAN CALIBOSO: Is that sorry.
8	THE WITNESS: We provided for revenue losses toward
9	estimated revenue loss well, I shouldn't say revenue
10	losses. We provided for the savings that successful
11	participation in those options have. We have provided for
12	their savings in the revenue I'm sorry, in the rate design
13	to maintain the revenue requirement.
14	CHAIRMAN CALIBOSO: So, I'm sorry, you have an
15	accounting for it?
16	MR. YOUNG: For existing optional rate customers
17	and those would be just Rider M and Rider G customers.
18	CHAIRMAN CALIBOSO: So
19	MR. YOUNG: In the future, the parallel would be in
20	a future rate case if we have no participation in these other
21	optional rates, TOU-R TOU-G, TOU-J, where we could
22	successfully estimate of their savings, we might be able to
23	include that in the revenue requirement and adjust proposed
24	rates to reflect that.
25	CHAIRMAN CALIBOSO: So maybe and this is a

question -- is it -- for it to do any good would time-of-use rates have to be a mandatory program?

And I'll open it up to the Consumer Advocate as well, and this is probably for a future case, of course, but for it to do any real good, does it have to be a mandatory program?

MR. BROSCH: If you want to get past the adverse selection, kind of, issue you spoke up where only rational customers would opt in and reduce revenues, then, yes, at some point, to capture the winners and the losers and balance out the revenue effects, you would eventually consider moving to mandatory time-of-use rate search.

MR. YOUNG: We would -- a mandatory time-of-use regime would certainly require us to design time-of-use rates that are more closely related to costs for those designated time periods. The other part I would -- or comment I would have related to mandatory time-of-use rates is that, absent data on all customers, as far as when actual usage occurs, we would be making under mandatory time-of-use rates, we'd be making estimates of where a customers use revenue and that --

MR. HEMPLING: I'm sorry, what?

MR. YOUNG: We'd be making -- thank you -- we'd be making estimates of when customers would use energy under mandatory time-of-use rates in order to set rates to get to achieve the revenue requirement, that would be a much larger

challenge than it is now. I would suggest that I have no doubt that we would be -- set rates that would generate too much or too little revenue, and sales decoupling, in my opinion would be a necessary thing that we would have to accommodate -- I'm sorry -- be approved along with mandatory time-of-use rates. They would have to both be in place in order to be successful.

CHAIRMAN CALIBOSO: And what else would we need to get to that point because with this 1,000 limit, 1,000 customer limit, we're really not going to achieve the goal of shifting the peak enough in order to avoid the need to bill to that higher peak, bill generation to the higher peak?

What else do we need to get to that point?
The infrastructure, of course.

What else?

MR. YOUNG: When you refer to the infrastructure, and I don't mean to put words in your mouth; but, certainly, that that means an ability to measure time-of-use information at the customer's point of view and being able to take that information and transfer it to a billing system that can automatically bill that efficiently, then those are necessary components of implementing a mandatory time-of-use rates, it's additional to having an appropriate rate design.

CHAIRMAN CALIBROSO: What about getting the necessary data to get to that point?

Would this initial program help or this smaller program help?

1.4

MR. YOUNG: I think this smaller program -- well, to the extent that we have had data from this program, and I'm sure we will have some data, it will help us be sensitive or be aware of how customers or certain customers who elect to participate may respond to certain price differentials and that will be certainly a part of any time-of-use rate design whether it's optional or mandatory.

CHAIRMAN CALIBOSO: It sounds like the data would probably be skewed to those who can actually move their usage, right, because those are the only people that are going to sign up?

MR. YOUNG: Data from an optional program, yes. I would suggest that even if we were to move to a mandatory time-of-use pricing regime, it would be a transition certainly where we would have to assess how customers are using the electricity and how their bills are effected, and we probably be moving towards almost new equilibriums as we assess the data and see how customers perform; and, that's also another reason why you'd have to have sales decoupling to go along with that so you can be confident the revenue was appropriate as you move there, but, certainly, we, by no means, will we think that we can get to the right mandatory time-of-use rates and the signals that it certainly would be a process.

1 CHAIRMAN CALIBOSO: Is the Company collecting data 2 from the advance meters that are already installed for this purpose or would that be possible? 3 MR. FETHERLAND: Well, I mean, it's been sort of an 4 evolution, but, I think, the general answer is, yes. 5 just -- you know, we don't have a back end data management 6 7 system right; but, if we really wanted to do it, yes, we could come up with a plan to do that. 8 CHAIRMAN CALIBOSO: Does that depend on the CIS or 9 is that something else? 10 MR. FETHERLAND: No, it doesn't depend on the CIS. 11 12 This type of volume of 10,000 meters we can probably handle it, you know, from a data perspective, get into the database 13 14 and stuff like that, that's really straightforward. 15 CHAIRMAN CALIBOSO: What about the population 16 makeup of those customers with the smart meters, do you think it's diverse enough to represent the residential customers 17 18 base? 19 MR. FETHERLAND: Probably, not. I mean, you know 20 we have -- we specifically picked like Ocean Point because it 21 was in a continuous number of routes. You know, so that's, 22 kind of, good if you're looking for air conditioning impacts. 23 We have the thousand meters up in a more of mountainous valley areas; but, you know, really from a 24 statistical standpoint, it's better than -- you know, it's not

25

```
1
     bad, but a statistician would -- they would not even agree to
2
     do something like that; so, I would say, from a rigorous
     standpoint, no, it wouldn't be.
 3
                CHAIRMAN CALIBOSO: That's probably the best we can
 4
 5
     get --
                MR. FETHERLAND:
                                 Yes --
                CHAIRMAN CALIBOSO: -- right now?
 7
 8
                MR. FETHERLAND: -- right now.
 9
                CHAIRMAN CALIBOSO:
                                    Does the program now,
10
     Mr. Young, does that provide for reporting or tracking of data
11
     with the customers you do get in this and maybe with the
12
     additional meters that are available for a little bit bigger
13
     population?
14
                Would that be possible?
15
                MR. YOUNG: Certainly, we could collect and report
16
     on the data that we do have.
                CHAIRMAN CALIBOSO: All right.
                                                 Thank you.
1.7
18
                Mr. Hempling, do you have anything else on this?
19
                MR. HEMPLING: Just one question, I guess, sir.
20
                When you refer to the back-end data management
21
     process where you said the bottleneck is, is it personnel, is
22
     it technology, what is it about?
                MR. FETHERLAND: What I was referring to is really
23
     the CIS. You know we're planning this for the MI product to
24
25
     put in what's called a "metered data management system," and
```

```
1
     sorts of a big deal. It's not something that you just, you
2
     know, go to CostCo and slop it in so --
3
                MR. HEMPLING: That's something you want?
 4
                MR. FETHERLAND:
                                 That you don't go down to Costco
5
     and sort of slop it in.
 6
                So in terms of what the Chairman was talking in
 7
     getting data and organizing it and analyzing it, that's a
8
     totally different matter than billing. So it's certainly
 9
     easier to handle raw data and put it in a form that you can
10
     get some (inaudible) out of; but, what I was talking about was
11
     getting data that actually goes in and day out because of
12
     billing, which is CIS.
13
                MR. HEMPLING: Well, is there also a personal
14
     matter in terms of people who process it and the Company has
15
     sufficient people on staff to do that at higher levels than
16
     now?
17
                                 The billing aspect that, I think,
                MR. FETHERLAND:
18
     that Peter had talked about is that, yeah, that is a personnel
19
     bottleneck. As far as in my area in terms of data accounting,
20
     I'm pretty confident we can get the raw data and analyze it;
21
     so, there is no bottleneck getting and looking at the data.
22
                MR. HEMPLING: So there is a personnel bottleneck
23
     somewhere?
24
                MR. FETHERLAND: It depends on what -- if you're
25
     looking at -- looking -- if you're looking at the data for the
```

```
1
     purposes of what the Chairman talked about, I think there is
 2
     sufficient resources. We're a little constrained, I would
 3
     say, in the market research area. That person has a lot of
 4
     things to do, so there may be a bottleneck there; but,
 5
     certainly, on the CIS side, like Peter said, there is a
 6
     bottleneck.
 7
                              That's technical, not personnel?
                MR. HEMPLING:
                MR. FETHERLAND: No, it's both actually.
 8
 9
                MR. HEMPLING: So how does that problem get solved?
10
                MR. FETHERLAND: On the CIS side?
11
                MR. HEMPLING: Well, let's talk about both of them.
12
                MR. FETHERLAND: That might not be a question for
13
          I mean, you could solve it, I mean, in a very brute force
14
     way by hiring a few more people, I suppose.
15
                MR. HEMPLING: What type of training are we talking
16
     about?
                MR. FETHERLAND: I think they'd have to know how to
17
     use a spreadsheet probably.
18
                MR. HEMPLING: That's it?
19
20
                MR. FETHERLAND:
                                 I don't know. I don't do the job,
     so I shouldn't speculate on that, so it might not be a good
21
22
     question for me to answer; but, you know, it's -- I don't
23
     think it's like building the space shuttle but pretty
24
     straightforward.
25
                MR. HEMPLING:
                               Thank you.
```

1	CHAIRMAN CALIBOSO: Okay. Thank you.
2	Cross-examine time for the parties.
3	Mr. Kikuta?
4	MR. KIKUTA: Hawaiian Electric has no questions.
5	MR. MCCORMICK: The Department of Defense has no
6	questions.
7	MR. ITOMURA: The Consumer Advocate has no
8	questions.
9	CHAIRMAN CALIBOSO: Thank you.
10	The next panel is the Management Audit panel, Panel
11	11; but, I understand some witnesses might not be available
12	this afternoon for that panel; so, we will continue tomorrow
13	with the Management panel, Management Audit, Panel 11; and,
14	after that, we will do the Informational Advertising Panel,
15	Panel 12, tomorrow as well.
16	So those two topics will be tomorrow; so, we will,
17	after today, we'll break until tomorrow at 9 a.m. I think
18	Mr. Hempling has a few comments to make.
19	MR. HEMPLING: Yes. Ladies and gentlemen, in terms
20	of the purpose of the management audit panel for tomorrow,
21	it's kinds of open; but, in order to keep us from regressing
22	into generalities, here are a few thoughts that we have about
23	the purposes of that panel.
24	Mr. Brosch, in his CAST-1, pages 12 to 14,
25	contrasted the value of having issues, specific management

audits, versus having a general

2 | how's-the-Company-doing-type-of audit; and, without

3 | necessarily saying the Commission agrees or disagrees with

4 | that, the relevance of that distinction, it's a useful

5 distinction for the conversation tomorrow to talk about the

6 pros and cons of no audits of audits that are very generic

7 | and/or audits that are specific to particular areas.

And so one aspect for the conversation tomorrow will be identifying particular areas that have arisen in this case as being of special interest to the Commission to the HCEI Agreement to other parties and identifying whether some more detailed probing into the Company's activities and effectiveness in those areas would be worthwhile.

I guess implicit in what I'm saying is answers like, "We're doing that already or we're doing our best" are less likely to lead to productive conversation than responses like that sounds like something we can look into further, let's discuss the most efficient way to look into.

So that would be the type of one aspect to the discussion tomorrow. It's possible that another aspect of discussion would focus on various applications -- what's the gentleman's name? -- of the type of conversations

Mr. Fetherland was just bringing up, which is where are the bottlenecks in the Company, both personnel and technical, mechanical, where the bottlenecks to progress in particular

, I	
1	areas, because this is a case about money and about cost
2	recovery, and the more that the Commission knows about needs
3	that can be satisfied with money, the more the Commission can
4	induce certain behaviors.
5	And I'm curious are there any other aspects to the
6	management audit conversation that folks would like to have;
7	so, that we can all prepare.
8	Anybody have any thoughts?
9	I know nobody wants it to go away.
10	MR. BROSCH: Going back to my testimony just
11	briefly, there's the whole process, administration and
12	management set of the questions
13	MR. HEMPLING: Yep.
14	MR. BROSCH: just logistically how you will do
15	this, if you decided to do it.
16	MR. HEMPLING: Thank you. Be it being having some
17	kind of audit?
18	MR. BROSCH: I'm sorry?
19	MR. HEMPLING: The "it" being some kind of audit?
20	MR. BROSCH: Correct.
21	MR. HEMPLING: Any other thoughts?
22	Okay. That's all I have for tomorrow's discussion.
23	CHAIRMAN CALIBOSO: All right.
24	Any questions before we recess?
25	Seeing none, thank you.

```
We will recess and reconvene tomorrow morning at
 1
2
     9 a.m.
                 (Whereupon, at 12:09 p.m., the hearing adjourned,
 3
     and is to be resumed on Friday, October 30, 2009, at 9 a.m.)
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

CERTIFICATE

This is to certify that the attached proceedings before the Public Utilities Commission of the State of Hawaii In the Matter of the Application of Hawaiian Electric Company, Inc. For Approval of Rate Increases and Revised Rate Schedules and Rules, at 465 South King Street, Honolulu, Hawai'i, commencing, on Thursday, October 29, 2009, was held according to the record, and that this is the original, complete, and true and accurate transcript that has been compared to the reporting or recording, accomplished at the hearing, that the exhibit files have been checked for completeness and no exhibits received in evidence or in the rejected exhibit files are missing.

Sistem- Greigh ISANO. 469, ATLANO. 24904

TRISTAN-JOSEPH, CSR NO. 469, RPR NO. 24906